



DeKalb County Department of Planning & Sustainability

178 Sams Street

Decatur, GA 30030

(404) 371-2155 / www.dekalbcountyga.gov/planning

Board of Commissioners Hearing Date: May 26, 2022

STAFF ANALYSIS

Michael
Thurmond

Case No.: Z-21-1244885 **Agenda #:** D6

Location/Address: 3795 North Druid Hills Rd.,
Decatur, GA 30033 **Commission District:** 02
Super District: 06

Parcel ID: 18-100-04-019

Request: Request to rezone the property from NS (Neighborhood Shopping) to C-1 (Local Commercial) to allow for the development of a drive-through restaurant.

Property Owner(s): Midtown National Group, LP

Applicant/Agent: David Kirk, on behalf of Chick-fil-a, Inc.

Acreage: 1.04 acres

Existing Land Use: Retail Commercial

Surrounding Properties: To the north of the subject property is North Druid Hills Road, to the south is North DeKalb Mall, to the west is commercial, and to the east is commercial.

Adjacent Zoning: **North:** R75, O-I **South:** C-1 **East:** C-1 **West:** C-1

Comprehensive Plan: **Town Center (TC)** **Consistent** **Inconsistent**

| | |
|---|---|
| Proposed Density: N.A. | Existing Density: N.A. |
| Proposed Square Ft.: 2,800 sq. ft. | Existing Units/Square Feet: N.A. |
| Proposed Lot Coverage: 6.14% | Existing Lot Coverage: N.A. |

Subject Property and Surrounding Area

The subject property is a 1.04-acre site located on the south side of North Druid Hills Road bordering the north side of the North DeKalb Mall. An on-ramp to I-285 is located approximately 1,700 feet to the east of Lawrenceville Highway (Highway 78). The property is currently occupied by a vacant commercial retail establishment; formerly a Pier 1 Imports store. The adjoining and nearby land uses to the east, south, and west are commercial uses zoned C-1 and NS. The adjoining and nearby land uses to the north are mix of residential and commercial uses zoned R-75 and O-I. The commercial uses to the east of the subject property and fronting on North Druid Hills Road consist of four drive-through restaurants (Zaxby's, McDonalds, Chick-fil-A, and Checkers). Also, to the east of the subject property, uses include an existing dry-cleaners, auto repair shop, liquor store, gas station, and jeweler. There is also an existing 3-story commercial building that appears to have Class C office space with various existing businesses which include a store front church, hair salon, and a driving school. West of the subject property are two existing one story buildings home to Peachtree Spine Physicians as well as a pet hospital. South of the subject property is an undeveloped lot and North Dekalb Mall. It is important to note that the mall technically closed in 2020, however, there are a few stores, a U.S. Postal Service branch, and an AMC movie theatre still operating along perimeter of the physical mall site. To the north of the subject property, is a mix of residential and commercial uses. The residential uses are mostly located in the North Druid Woods neighborhood. It is a modest neighborhood consisting of one store ranch style homes. Office residential uses along this portion of the corridor consist of a holistic health center, auto insurance office, a dry cleaner, travel agent's office, massage therapist, and chiropractor.

Zoning History

Based on DeKalb County records, it appears that the NS (Neighborhood Shopping) zoning of the property has not changed since adoption of the first zoning ordinance and map in 1956. The *DeKalb County 2035 Comprehensive Plan* designates the subject property's future land use as Town Center (TC).

Project Analysis

The applicant is requesting to rezone the subject property from NS (Neighborhood Shopping) to C-1 (Local Commercial) for the purpose of constructing a drive-through restaurant. The applicant's request proposes the relocation of the Chick-fil-A restaurant from 3905 N. Druid Hills Road to the subject property. Based on the site plan provided by the applicant, the construction of the 2,800 square foot drive through restaurant will require the demolition of the vacant one-story building which was a furniture and home essentials retail establishment (Pier 1 Imports). The project will make use of the two existing connections to Birch Road and North Druid Hills Road. These connections will serve as both entrances and exits for customers. The North Druid Hills access will serve as a right-in/right-out only. The drive-through restaurant will consist of three drive-through lanes that merge into two lanes as they approach the drive through service area, which will permit servers to walk food out instead of using a drive-through window. The redeveloped site is proposed to accommodate vehicular stacking for 41 cars and include 29 parking spaces, of which, two will be designated for patrons with disabilities. The restaurant will also have outdoor seating for customers on the east side of the building. Additionally, the developer intends to install a variety of trees and shrubs around the site to beautify it and buffer some of the vehicular activity.

Impact Analysis

A. Whether the zoning proposal is in conformity with the policy and intent of the comprehensive plan:

The proposed rezoning is in conformity with the policies and intent of the *DeKalb County Comprehensive Plan*. The subject property is located in the Town Center (TC) future land use area. The intent of the Town Center character area is “to promote the concentration of residential and commercial structures, which serve many communities in order to reduce automobile travel, promote walkability and increased transit usage. The areas consist of a focal point for several neighborhoods with a variety of activities such as general retail, commercial, professional office, higher-density housing, and appropriate public and open space uses that are easily accessible by pedestrians.” The C-1 Zoning District is a permitted zoning district within the Town Center future land use designation along with medium density, high density, and mixed-use zoning districts. The current NS zoning is not a permitted zoning district within the Town Center designation, therefore, this zoning change request would contribute to the implementation of the *Comprehensive Plan*.

B. Whether the zoning proposal will permit a use that is suitable in view of the use and development of adjacent and nearby properties:

The proposed rezoning to C-1 (Local Commercial) will be consistent with many of the existing zoning designations of surrounding properties including North DeKalb Mall. This is reflective of a gradual change in this vicinity to C-1. This zoning consistency may contribute to future redevelopment of the mall and surrounding properties and streamline the ability to assemble surrounding properties in the future. Additionally, a zoning change from NS to C-1 supports future land use goals to permit a greater intensity of nonresidential development in the vicinity of the subject property. As a preferred zoning district within the town center character area, it is implied that the C-1 zoning district and its collection of permissible principal and accessory uses are suitable; prohibited uses are not suitable; and that other uses are subject to special land use permit approval in order to evaluate the appropriateness of those uses based on impacts and conditions that may be unique depending on their settings.

C. Whether the property to be affected by the zoning proposal has a reasonable economic use as currently zoned:

The subject property may have limited economic use as currently zoned (NS). There are other active properties in the vicinity within the NS Zoning District. The Neighborhood Shopping (NS) Zoning District permits uses including, but not limited to: places of worship, offices, retail, indoor recreation, daycare, and hair care services. The Local Commercial (C-1) Zoning District permits uses including, but not limited to: places of worship, offices, retail, indoor recreation, daycare, hair care services, furniture repair, medical services, special trade contractors, dog grooming, drive-through restaurants, live/work units, hotels/motels, colleges/universities, research facilities, and theatres.

While the vacant use, Pier 1 Imports (i.e., home furnishing/furniture retail), which was a casualty of an international slate of store closings in 2020

(<https://www.usatoday.com/story/money/2020/02/17/pier-one-imports-store-closures-list-2020-bankruptcy/4555899002/>), may not be an indication of the viability (or lack thereof) of the current zoning classification, rezoning to C-1 would enhance the property's prospects for reuse.

D. Whether the zoning proposal will adversely affect the existing use or usability of adjacent or nearby property:

The immediate environment around the subject property primarily consists of commercial uses zoned C-1. C-1 permits a wide range of nonresidential options that may produce varied impacts on adjacent properties in the immediate area or beyond. Given the popularity of Chick-Fil-A restaurants, redevelopment of the site will likely immediately improve the condition of the property and significantly increase the activity on-site in comparison to its current condition or previous condition when the Pier 1 Imports was open, anecdotally. The applicant provided a crash data comparison (see *Crash Data Exhibit*) of the existing location and the subject property along with an intersection analysis (see *N Druid Hills and Birch Rd Intersection Analysis*) which indicates that the relocation of the Chick-Fil-A will place it at a location with fewer accidents and that the redevelopment will not significantly alter the level of service at the Birch Road/North Druid Hills Road intersection, respectively. It is important to remember that with the redevelopment of the mall site traffic in the area will likely increase. Since the requested use is subject to a special land use permit (SLUP) approval, the response to this criterion is best addressed in the corresponding SLUP application.

E. Whether there are other existing or changing conditions affecting the use and development of the property, which give supporting grounds for either approval or disapproval of the zoning proposal:

North Druid Hills Road is designated as a major arterial road. Thus, it is a heavily traveled corridor. Any use on the subject property should aim to reduce transportation conflicts, reduce curb cuts, promote inter-parcel access arrangements, reduce hindrances to vehicular mobility, and promote efficient ingress/egress.

Additionally, it is worth noting that recently the North Dekalb Mall site was sold and there have been preliminary plans submitted for the redevelopment of North DeKalb Mall into a mixed-use development. With the development of the mall site, it will help to activate the area and will directly connect to the subject site through sidewalk access, pathways, and potential bike lanes. The redevelopment of the mall site as well as the subject site will help to increase both pedestrian and vehicle activity in the area making it more attractive to businesses and more convenient for local residents.

F. Whether the zoning proposal will adversely affect historic buildings, sites, districts, or archaeological resources:

There are no known historic buildings, sites, districts or archeological resources that would be adversely affected by the rezoning request from NS (Neighborhood Shopping) to C-1 (Local Commercial).

G. Whether the zoning proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools:

C-1 permits a wide range of commercial options that may produce varied impacts on public infrastructure. Since the requested use is subject to a special land use permit (SLUP) approval, the response to this criterion is best addressed in the corresponding SLUP application. However, one possible mitigating factor is that the proposal includes the relocation of the drive-thru restaurant from its current location to the subject property. Theoretically, there could be a zero-sum impact. Alternatively, relocation to the subject property creates a vacancy at the current Chick-fil-A location that may be reused or redeveloped and create additional impacts.

H. Whether the zoning proposal adversely impacts the environment or surrounding natural resources.

The request for rezoning from NS (Neighborhood Shopping) to C-1 (Local Commercial) has not generated any specific impacts to the environment or surrounding natural resources.

Compliance with district standards

Per the chart below, the proposed C-1 (Local Commercial) drive-through restaurant does not comply with the minimum development standards for setbacks in the front, side, and rear for the C-1 (Local Commercial) District per Table 2.2 of the DeKalb County Zoning Ordinance.

| <u>C-1 STANDARD</u> | <u>REQUIREMENT</u> | <u>PROPOSED</u> | <u>COMPLIANCE</u> |
|------------------------------------|---------------------------|------------------------|--------------------------|
| FRONT (all other streets) | 10ft min/60ft max | < 60ft. | YES |
| SIDE INTERIOR | 15ft. | > 15ft. | YES |
| SIDE – Corner lot on public street | 30ft. | < 30ft. | NO (variance needed) |
| REAR | 20ft. | > 20ft. | YES |
| HEIGHT | 2 story/35 ft. | ≈ 21ft. | YES |

Staff Recommendation

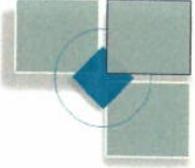
The rezoning proposal is consistent with the *2035 Comprehensive Plan*. The TC (Town Center) future land use designation supports the requested zoning designation. Moreover, the rezoning from NS (Neighborhood Shopping) to C-1 (Local Commercial) would permit a zoning designation that is more consistent with the zoning of the surrounding properties. Therefore, Staff recommends approval.



DeKalb County Department of Planning & Sustainability

Michael L. Thurmond
Chief Executive Officer

Andrew A. Baker, AICP
Director



APPLICATION TO AMEND OFFICIAL ZONING MAP OF DEKALB COUNTY, GEORGIA

Z/CZ No. _____

Filing Fee: _____

Date Received: _____ Application No.: _____

Applicant: David Kirk, on behalf of Chick-fil-A, Inc. E-Mail: David.Kirk@troutman.com

Applicant Mailing Address: 600 Peachtree Street, Suite 3000, Atlanta, GA 30308

Applicant Phone: 404-885-3415 Fax: N/A

Owner(s): Midtown National Group LP E-Mail: N/A
(If more than one owner, attach as Exhibit "A")

Owner's Mailing Address: 9171 TOWNE CENTRE DR, STE 335, SAN DIEGO CA 92122

Owner(s) Phone: N/A Fax: N/A

Address/Location of Subject Property: 3795 North Druid Hills Road

District(s): Unknown Land Lot(s): 100 Block: Unknown Parcel(s): 18 100 04 019

Acreage: 1.04 Commission District(s): 2 and SD 6

Present Zoning Category: NS Proposed Zoning Category: C-1

Present Land Use Category: TC

PLEASE READ THE FOLLOWING BEFORE SIGNING

This form must be completed in its entirety before the Planning Department accepts it. It must include the attachments and filing fees identified on the attachments. An application, which lacks any of the required attachments, shall be determined as incomplete and shall not be accepted.

Disclosure of Campaign Contributions

In accordance with the Conflict of Interest in Zoning Act, O.C.G.A., Chapter 36-67A, the following questions must be answered:

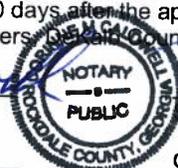
Have you the applicant made \$250 or more in campaign contributions to a local government official within two years immediately preceding the filing of this application? _____ Yes X No

If the answer is yes, you must file a disclosure report with the governing authority of DeKalb County showing;

1. The name and official position of the local government official to whom the campaign contribution was made.
2. The dollar amount and description of each campaign contribution made during the two years immediately preceding the filing of this application and the date of each such contribution.

The disclosure must be filed within 10 days after the application is first filed and must be submitted to the C.E.O. and the Board of Commissioners, DeKalb County, 1300 Commerce Drive, Decatur, Ga. 30030.

Cournee M. Caldwell
NOTARY



David C. Kirk 4/26/2021
SIGNATURE OF APPLICANT / DATE

January 14, 2022
EXPIRATION DATE / SEAL

My Commission Expires
January 14, 2022

Check One: Owner _____ Agent X

330 West Ponce de Leon Avenue – Suites 100-500 – Decatur, Georgia – 30030
[voice] 404.371.2155 – [Planning Fax] (404) 371-4556 [Development Fax] (404) 371-3007
Web Address <http://www.dekalbcountyga.gov/planning>
Email Address: planninganddevelopment@dekalbcountyga.gov

David C. Kirk
david.kirk@troutman.com

May 5, 2021

VIA U.S. CERTIFIED MAIL

Address Line
Address Line

Re: DeKalb County Community Meeting #2

Dear Neighbor:

I am writing to inform you of Chick-fil-A, Inc.'s ("Chick-fil-A") proposed Rezoning and Special Land Use Permit Applications (the "Applications") to be submitted to the DeKalb County Department of Planning & Sustainability to allow for the construction and operation of a new Chick-fil-A drive-through restaurant at 3795 North Druid Hills Road NE. This new restaurant will replace the older drive-through restaurant located nearby at 3905 North Druid Hills Road. The requested Rezoning Application seeks to rezone the property from Neighborhood Shopping ("NS") to Local Commercial ("C-1"). The Special Land Use Permit Application seeks approval of the associated drive-through facility. I am attaching for your review a copy of the Site Plan showing the proposed new restaurant and associated drive-through.

Chick-fil-A is holding a second Virtual Community Meeting via Zoom on **Thursday, May 20, 2021** at 5:30 P.M., at which time Chick-fil-A will share details of the proposal with attendees. To join the Virtual Community Meeting, please enter the web address below into your internet browser (with no spaces) and follow the prompts to join the meeting.

Web Address:

<https://troutman.zoom.us/j/92657834227?pwd=K1pGRWpKSk0xM1pBMldyKzdNREIKZz09>

Meeting ID: 926 5783 4227

Password: 425462

You may also join the Virtual Community Meeting by phone via the following number:

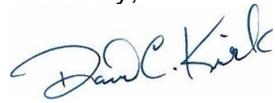
Number: 1-929-436-2866

Meeting ID: 926 5783 4227

Passcode: 425462

Should you have any questions about the Applications and proposed Chick-fil-A restaurant, please do not hesitate to give me a call at (404) 885-3415.

Sincerely,

A handwritten signature in blue ink that reads "David C. Kirk". The signature is written in a cursive style with a large initial "D" and "K".

David C. Kirk

CHICK-FIL-A COMMUNITY MEETING SIGN-IN SHEET

Wednesday, April 28, 2021 5:30 p.m.

Virtual Meeting Via Zoom

| NAME | ADDRESS |
|----------------|--|
| Stacey Russell | EyeTravel737@gmail.com (Mount Olive Drive) |
| Cedric Hudson | (County) |
| | |
| | |
| | |

David C. Kirk
david.kirk@troutman.com

April 29, 2021

VIA HAND DELIVERY AND EMAIL

Mr. Andrew Baker, AICP
Director
DeKalb County Department of Planning & Sustainability
330 West Ponce de Leon Avenue, Suites 100-500
Decatur, Georgia 30030

Re: Rezoning and Special Land Use Permit Application for 3795 North Druid Hills Road

Dear Mr. Baker:

On behalf of Chick-fil-A, Inc. ("Chick-fil-A" or the "Applicant"), I am pleased to provide for review and consideration by DeKalb County this letter of intent and the accompanying application materials in support of the requested Rezoning of the above-referenced property (the "Subject Property") from its current classification Neighborhood Shopping (NS) to the Local Commercial (C-1) classification and Special Land Use Permit ("SLUP") to allow for a drive-through restaurant. If approved, the Rezoning and SLUP will allow for the redevelopment of the Subject Property, which currently contains a vacant retail storefront, into a new, custom-designed 2,800 square-foot Chick-fil-A restaurant with a drive-through facility, outdoor seating, pedestrian improvements, and enhanced landscaping. The proposed development will update the Subject Property into an attractive, modern restaurant in keeping with the demands of the current market, customer expectations and team member needs, and current County requirements.

Included with this letter of intent are the following materials:

- A. An Application to Amend the Official Zoning Map of DeKalb County;
- B. A Special Land Use Permit Application;
- C. A Site Plan;
- D. A Survey and Legal Description of the Subject Property;
- E. A Landscape Plan;

- F. Architectural Elevations and Renderings; and
- G. An impact analysis for the requested SLUP and justification for the proposed Rezoning (included within the body of this letter).

Summary of the Proposed Project

As noted above, the Applicant seeks approvals necessary to redevelop the Subject Property, which now contains a vacant retail store (previously occupied by Pier 1 Imports) and associated street-fronting parking lot. On this property, Chick-fil-A proposes to construct and operate a new, custom-designed restaurant containing approximately 2,800 square feet of space. The restaurant will include a drive-through facility located in the rear of the property with 41 stacking spaces, 29 off-street parking spaces, outdoor seating, an improved streetscape, and enhanced landscaping. The Subject Property is currently zoned Neighborhood Shopping (NS), which does not permit drive-through restaurants. The Applicant requests the Subject Property to be rezoned from NS to Local Commercial (C-1) to allow for a drive-through restaurant. The proposed new restaurant will replace the older Chick-fil-A drive-through restaurant located nearby at 3905 North Druid Hills Road and is designed to better reflect the County's desired goals for design, traffic efficiency, and pedestrian accessibility.

Zoning Map Amendment Review and Approval Criteria

Proposed zoning amendments are evaluated in light of the following standards.

1. *Whether the zoning proposal is in conformity with the policy and intent of the Comprehensive Plan.*

Chick-fil-A's proposed redevelopment of the Subject Property is consistent with the County's Comprehensive Development Plan and Future Land Use Map, which designates the Subject Property as "Town Center." The Subject Property is currently occupied by a commercial retail use and will continue to be used commercially as a result of the proposed redevelopment. The Town Center character area specifically permits C-1 zoning classifications. The proposed building design, including its orientation to the street, enhanced streetscape improvements, and "walk-up" window will encourage pedestrian accessibility consistent with the Town Center goals.

2. *Whether the zoning proposal will permit a use that is suitable in view of the use and development of adjacent and nearby properties.*

The Subject Property is directly adjacent to a Zaxby's drive-through restaurant and is located across the street from a physician's office and the North DeKalb Mall. The proposed restaurant is consistent with the adjacent and nearby commercial uses located along North Druid Hills Road and will replace the vacant retail storefront with a custom-designed restaurant. The Applicant respectfully submits the zoning proposal will permit a use that is suitable in view of the use and development of adjacent and nearby properties and will not only efficiently accommodate vehicular traffic but will also be more welcoming to pedestrians.

3. *Whether the property to be affected by the zoning proposal has a reasonable economic use as currently zoned.*

The Applicant respectfully submits the proposed redevelopment will substantially enhance the economic use of the property by replacing the existing vacant retail store into a new, custom-designed Chick-fil-A restaurant with a drive-through facility, outdoor seating, enhanced landscaping, and streetscape improvements.

4. *Whether the zoning proposal will adversely affect the existing use or usability of adjacent or near-by properties.*

The proposed redevelopment will include a custom-designed, well-landscaped restaurant, and associated drive-through. The proposed redevelopment will have a positive effect on the surrounding neighborhood as it will encourage and accommodate pedestrian access.

5. *Whether there are other existing or changing conditions affecting the use and development of the property which give supporting grounds for either approval or disapproval of the zoning proposal.*

The Subject Property is currently occupied by a vacant retail storefront and associated street-fronting parking lot. The zoning proposal is intended to allow for the redevelopment of the Subject Property as a Chick-fil-A restaurant in a manner that better reflects the County's desired goals for design, traffic efficiency, and pedestrian accessibility. Chick-fil-A seeks to make a significant investment in this location and redevelop the existing site in a manner that it believes will benefit the surrounding community. The proposed drive-through will be located behind the new restaurant building and thus will be shielded from view along the public right-of-way. The proposed site improvements will result in more efficient, inviting, and safe pedestrian and traffic movement within the Subject Property and on nearby roadways and sidewalks.

6. *Whether the zoning proposal will adversely affect historic buildings, sites, districts, or archaeological resources.*

The Applicant respectfully submits the zoning proposal will have no adverse effect on any historic or archaeological resources. The redevelopment will be designed consistent with County's design, transportation accessibility, and landscape goals and the Applicant believes the improvement of the Subject Property will have a positive impact on adjacent and nearby properties.

7. *Whether the zoning proposal will result in a use which will or could cause excessive or burdensome use of existing streets, transportation facilities, utilities or schools.*

The zoning proposal will not cause an excessive or burdensome use of existing streets, transportation facilities, or utilities and will have no impact on school enrollment. The more pedestrian-oriented design of the site should encourage customers who live or work nearby to walk to the restaurant.

Special Land Use Permit Review Criteria

1. *Adequacy of the size of the site for use contemplated and whether or not adequate land area is available for the proposed use including provision of all required yards, open space, off-street parking, and all other applicable requirements of the zoning district in which the use is proposed to be located.*

The Subject Property is just over one acre in size and is sufficient to accommodate the proposed restaurant, outdoor seating, drive-through facility, and necessary parking.

2. *Compatibility of the proposed use with adjacent properties and land uses and with other properties and land uses in the district.*

The Subject Property is directly adjacent to a Zaxby's drive-through restaurant and is located across the street from a physician's office and the North DeKalb Mall. The proposed restaurant is consistent with the commercial uses located in this portion of the County and along North Druid Hills Road and will replace the vacant retail storefront with a custom-designed restaurant. The Applicant respectfully submits the zoning proposal will permit a use that is suitable in view of the use and development of adjacent and nearby properties and will not only efficiently accommodate vehicular traffic but will also be more welcoming to pedestrians

3. *Adequacy of public services, public facilities, and utilities to serve the use contemplated.*

Existing public facilities and services are adequate to serve the proposed restaurant and drive-through facility.

4. *Adequacy of the public street on which the use is proposed to be located and whether or not there is sufficient traffic-carrying capacity for the use proposed so as not to unduly increase traffic and create congestion in the area.*

There is sufficient traffic carrying capacity for the proposed restaurant use on North Druid Hills Road. The zoning proposal will allow for the redevelopment of the Subject Property in a manner that better reflects the County's desired goals for design, traffic efficiency, and pedestrian accessibility. The proposed drive-through will be located

behind the new restaurant building and thus will be shielded from view along the public right-of-way. The proposed site improvements will result in efficient, inviting, and safe pedestrian and traffic movement within the Subject Property and on nearby roadways and sidewalks.

5. *Whether or not existing land uses located along access routes to the site will be adversely affected by the character of the vehicles or the volume of traffic generated by the proposed use.*

The Applicant submits the proposal will have no adverse effect on existing uses located on North Druid Hills Road. The proposed redevelopment should have no impact on the character or volume of vehicular traffic on North Druid Hills Road.

6. *Ingress and egress to the subject property and to all proposed buildings, structures, and uses thereon, with particular references to pedestrian and automotive safety and convenience, traffic flow and control, and access in the event of fire or other emergency.*

Ingress and egress will be provided from North Druid Hills Road and Birch Road. The proposed site improvements will result in efficient, inviting, and safe pedestrian and traffic movement within the Subject Property and on nearby roadways and sidewalks.

7. *Whether or not the proposed use will create adverse impacts upon any adjoining land use by reason of noise, smoke, odor, dust, or vibration generated by the proposed use.*

The proposed use will not create noise, smoke, odor, dust, or vibration.

8. *Whether or not the proposed use will create adverse impacts upon any adjoining land use by reason of the hours of operation of the proposed use.*

The proposed restaurant use will be open Monday through Saturday from approximately 6:30 a.m. to 10:00 p.m. The proposed hours of operation are consistent with other commercial uses located along North Druid Hills Road and will have no negative impact on adjoining land uses.

9. *Whether or not the proposed use will create adverse impacts upon any adjoining land use by reason of the manner of operation of the proposed use.*

The proposed use will be operated in a safe and efficient manner by a local Chick-fil-A operator and will have no adverse impact on adjoining property.

10. *Whether or not the proposed plan is consistent with all of the requirements of the zoning district classification in which the use is proposed to be located.*

The proposed Chick-fil-A restaurant is designed to be consistent with the goals and site development standards of the proposed C-1 zoning district.

11. Whether or not the proposed use is consistent with the policies of the Comprehensive Plan.

Chick-fil-A's proposed redevelopment of the Subject Property is consistent with the County's Comprehensive Development Plan and Future Land Use Map, which designates the Subject Property as "Town Center." The Subject Property is currently occupied by a commercial retail use and will continue to be used commercially as a result of the proposed redevelopment. The Town Center character area specifically permits C-1 zoning classifications. The proposed building design, including its orientation to the street, enhanced streetscape improvements, and "walk-up" window will encourage pedestrian accessibility consistent with the Town Center goals.

12. Whether or not the proposed plan provides for all required buffer zones and transitional buffer zones where required by the regulations of the district in which the use is proposed to be located.

The proposed site design provides for all required setbacks and buffer zones.

13. Whether or not there is adequate provision of refuse and service areas.

As shown on the attached Site Plan, the proposed site design provides for adequate refuse and service areas.

14. Whether the length of time for which the special land use permit is granted should be limited in duration.

Given Chick-fil-A's significant proposed investment in the redevelopment of the Subject Property, Chick-fil-A requests the Special Land Use Permit be granted with no expiration.

15. Whether or not the size, scale and massing of proposed buildings are appropriate in relation to the size of the subject property and in relation to the size, scale and massing of the adjacent and nearby lots and buildings.

The proposed one-story 2,800 square foot restaurant is appropriate in scale and size relative to the Subject Property and relative to other nearby buildings, which are predominantly one-story in height.

16. Whether the proposed plan will adversely affect historic buildings, sites, districts, or archaeological resources.

The zoning proposal will have no adverse effect on any historic or archaeological resources.

17. Whether the proposed use satisfies the requirements contained within the Supplemental Regulations for such special land use permit.

The proposed restaurant and associated drive-through facility meets the standards provided in Section 4.2.23 of the County's Ordinance concerning drive-through facilities.

18. Whether or not the proposed building as a result of its proposed height will create a negative shadow impact on any adjoining lot or building.

The proposed one-story building will have no negative shadow impact on adjacent properties.

19. Whether the proposed use would result in a disproportional proliferation of that or similar uses in the subject character area.

Approval of the proposed redevelopment of the Subject Property will not result in a disproportional proliferation of restaurant or drive-through uses. The proposed restaurant will replace the existing Chick-fil-A drive-through restaurant located nearby at 3905 North Druid Hills Road.

20. Whether the proposed use would be consistent with the needs of the neighborhood or of the community as a whole, be compatible with the neighborhood, and would not be in conflict with the overall objectives of the comprehensive plan.

Consistent with the County's design goals, the objectives of the comprehensive plan, and the neighborhood and community character, the proposed new restaurant is designed to better reflect the County's desired goals for design, traffic efficiency, and pedestrian accessibility.

Summary and Conclusion

I believe this letter of intent, together with the accompanying application and supporting documents, provide all the information required by the County to review and evaluate this request. If there are other materials or information you believe would be helpful to your review of this request, please do not hesitate to contact me. I look forward to our continued cooperative efforts on this important matter.

Yours very truly,



David C. Kirk
Attorney for Chick-fil-A

EXHIBIT A

Chief Executive Officer
Michael Thurmond

DEPARTMENT OF PLANNING & SUSTAINABILITY

Director
Andrew A. Baker, AICP

REZONE APPLICATION AUTHORIZATION

Completion of this form is required if the individual making the request is not the owner of the property.

DATE: 4/26/2021

CHECK TYPE OF APPLICATION:

- () LAND USE PLAN
- (x) REZONE
- () MINOR MODIFICATION

TO WHOM IT MAY CONCERN:

(1) (WE), Danon Young, on behalf of Midtown National Group LP
(Name of owner(s))

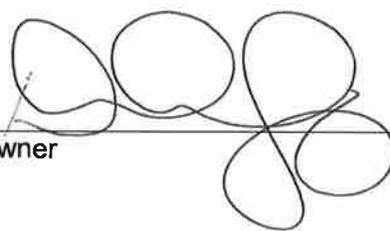
being (owner)/(owners) of the property described below or attached hereby delegate authority to
David C. Kirk, Troutman Pepper Hamilton Sanders LLP
(Name of Applicant or Agent Representing Owner)

to file an application on (my) / (our) behalf.

~~Notary Public~~

~~Notary Public~~

~~Notary Public~~


Owner

Owner

Owner

see attached Notary Acknowledgment

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

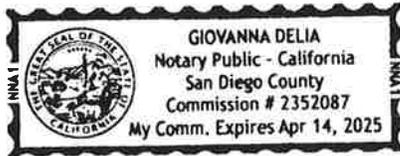
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of San Diego)
On April 26, 2021 before me, Giovanna Delia, Notary Public,
Date Here Insert Name and Title of the Officer
personally appeared Damon Young
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Signature Giovanna Delia
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

Corporate Officer — Title(s): _____

Partner — Limited General

Individual Attorney in Fact

Trustee Guardian or Conservator

Other: _____

Signer Is Representing: _____

Signer's Name: _____

Corporate Officer — Title(s): _____

Partner — Limited General

Individual Attorney in Fact

Trustee Guardian or Conservator

Other: _____

Signer Is Representing: _____

EXHIBIT B

DEPARTMENT OF PLANNING & SUSTAINABILITY

SPECIAL LAND USE PERMIT APPLICATION AUTHORIZATION

The property owner should complete this form or a similar, signed and notarized form if the individual who will file the application with the County is not the property owner.

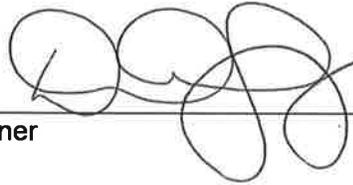
Date: 4/26/2021

TO WHOM IT MAY CONCERN:

(I) ~~(WE)~~, Daron Young, on behalf of Midtown National Group LP
Name of Owner(s)

being (owner) (~~owners~~) of the subject property described below or attached hereby delegate authority to
David C. Kirk, Troutman Pepper Hamilton Sanders LLP
Name of Applicant or Agent

to file an application on (my) (our) behalf.



Notary Public

Owner

Notary Public

Owner

Notary Public

Owner

Notary Public

Owner

see attached Notary Acknowledgment

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of San Diego)
On April 26, 2021 before me, Giovanna Delia, Notary Public,
Date Here Insert Name and Title of the Officer
personally appeared Daron Young
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Signature Giovanna Delia
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

- Corporate Officer — Title(s): _____
- Partner — Limited General
- Individual Attorney in Fact
- Trustee Guardian or Conservator
- Other: _____

Signer Is Representing: _____

Signer's Name: _____

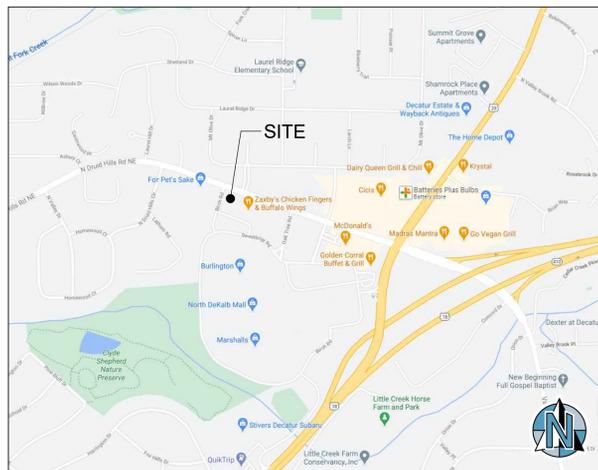
- Corporate Officer — Title(s): _____
- Partner — Limited General
- Individual Attorney in Fact
- Trustee Guardian or Conservator
- Other: _____

Signer Is Representing: _____

EXHIBIT C

| SITE DATA | |
|--|-------------------------|
| ZONING: | C-1 (LOCAL COMMERCIAL) |
| FUTURE LAND USE DESIGNATION: | TC (TOWN CENTER) |
| PARCEL IDENTIFICATION NUMBER: | 1810004019 |
| TOTAL SITE AREA: | 1.047 AC. |
| DISTURBED AREA: | 1.1 AC. |
| IMPERVIOUS SURFACE AREA MAXIMUM (%): | 0.942 AC. (90.0%) |
| IMPERVIOUS SURFACE AREA PROPOSED (%): | 0.726 AC. (69.3%) |
| OPEN SPACE AREA REQUIRED (%): | 0.105 AC. (10.0%) |
| OPEN SPACE AREA PROPOSED (%): | 0.321 AC. (30.6%) |
| FLOOR AREA RATIO MAXIMUM: | 20.00% |
| FLOOR AREA RATIO PROPOSED: | 6.14% |
| BUILDING HEIGHT PROPOSED: | 21'-4" |
| BUILDING SETBACK - FRONT (BIRCH ROAD): | 20 FT MIN. / 60 FT MAX. |
| SIDE (N. DRUID HILLS RD.): | 30 FT |
| SIDE (INTERIOR): | 30 FT |
| REAR: | 20 FT |
| LANDSCAPE BUFFER - FRONT (BIRCH ROAD): | 10 FT |
| SIDE (N. DRUID HILLS RD.): | 6 FT |
| SIDE (INTERIOR): | 5 FT |
| REAR: | 5 FT |
| BUILDING FLOOR AREA: | 2,800 S.F. |
| PARKING RATIO REQUIRED - MAX. 1 SPACE PER 775 S.F. MIN. 1 SPACE / 150 S.F. = | 19 SPACES |
| PARKING PROVIDED: | 29 SPACES |
| ACCESSIBLE PARKING REQUIRED: | 2 SPACES |
| ACCESSIBLE PARKING PROVIDED: | 2 SPACES |

- NOTES:**
- THIS PLAN IS CONCEPTUAL IN NATURE AND SUBJECT TO CHANGE
 - THIS PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA BASED ON THE FLOOD INSURANCE RATE MAP FOR THIS AREA. THE MAP NUMBER FOR THIS AREA IS 13089C0067K, AND THE DATE OF SAID MAP IS AUGUST 15, 2019.
 - NO STREAMS EXIST ON THE PROPERTY.



VICINITY MAP
NOT TO SCALE

N/F PROP
PATTEN & P.
DEED BOOK 212
ZONE
EXISTING MET

N/F PROPERTY OF
LCI-SVAP NDM JV, LP
DEED BOOK 24380 / PAGE 239
ZONED C-1

TRACT TWO
1.438 Acres
62,662 sf
ZONED C-1

2692 SWEET BRIAR ROAD
TAX PARCEL 18 100 04 014

TRACT ONE
1.047 Acres
45,590 sf
ZONED NS

3795 NORTH
DRUID HILLS
TAX PARCEL
18 100 04 019

N/F PROPERTY OF
McNORTH DRUID
HILLS LAND, LLC
DEED BOOK 22714 / PAGE 770
DEED BOOK 22714 / PAGE 775
ZONED C-1



Chick-fil-A

5200 BUFFINGTON ROAD
ATLANTA, GA 30349-2998

DEVELOPER:

CHICK-FIL-A, INC.

5200 BUFFINGTON ROAD
ATLANTA GA, 30349-2998
(404) 808-1145

CONTACT: MR. JASON POCIASK

ENGINEER:

FORESITE
group

ForeSITE Group, LLC. w | www.fg-inc.net
3740 Davinci Ct. o | 770.368.1399
Suite 100 f | 770.368.1944
Peachtree Corners, GA 30092

PROJECT:

3795 NORTH DRUID HILLS RD.
DECATUR, GA 30033
PARCEL #1810004019

FSR #04846

SEAL:



REVISIONS DATE

SITE NOTES 2021.04.29

PROJECT MANAGER: JMU

DRAWING BY: JRH

JURISDICTION: DEKALB COUNTY, GA

DATE: 2021-04-12

SCALE: 1" = 20'

TITLE:

PRELIMINARY SITE PLAN

SHEET NUMBER:

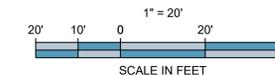
C-2.0

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 397.010



NORTH: 1,
EAST: 2,
E1



P:\1810004019\1810004019.dwg DATE: 04/12/21 11:58 AM BY: JACOBSON SHEET: 1 OF 1

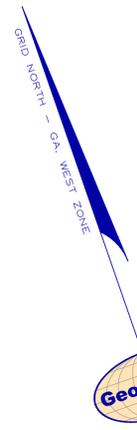
EXHIBIT D

TRACT ONE PROPERTY DESCRIPTION

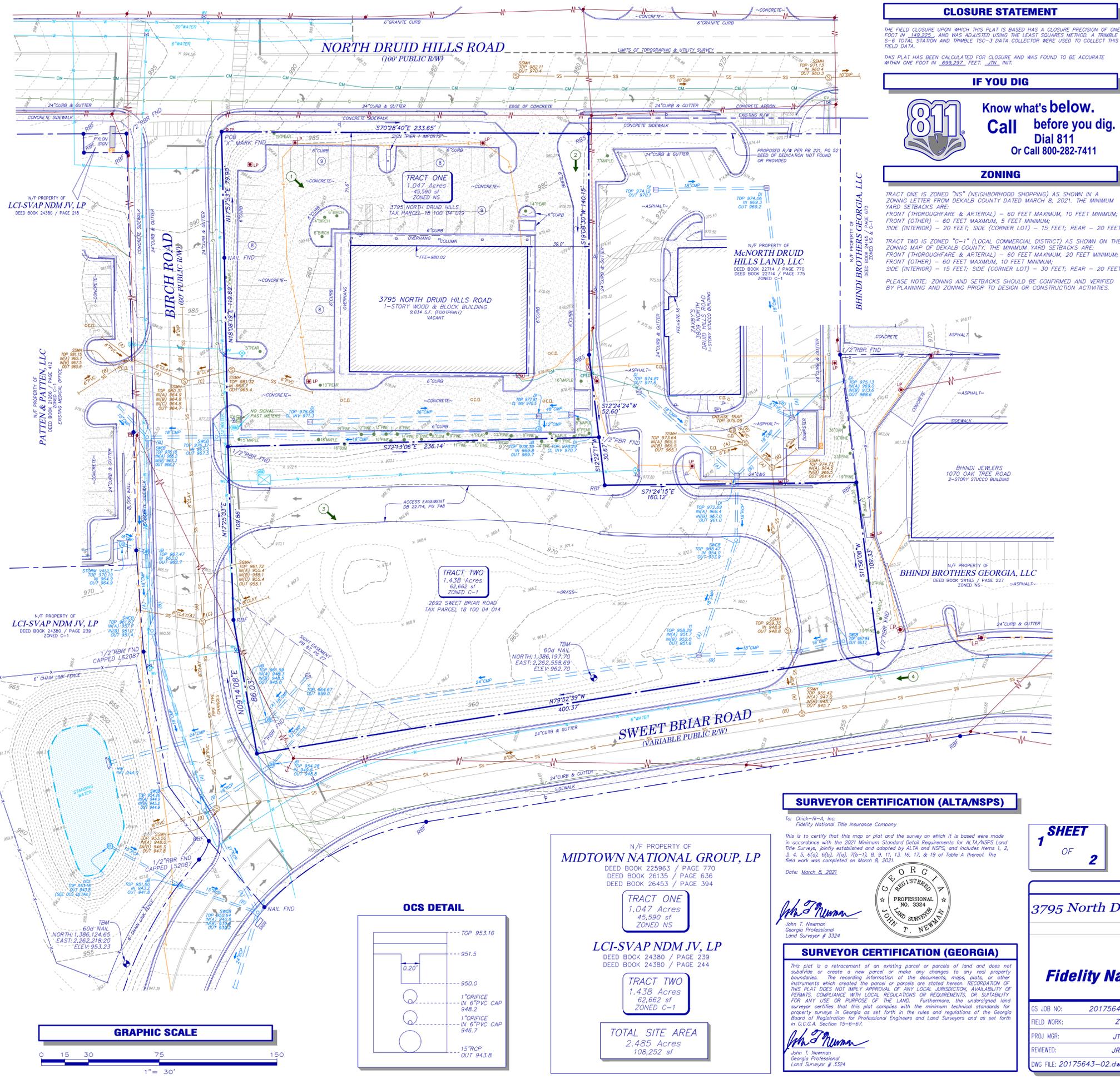
All that tract or parcel of land lying or being in Land Lot 100, 18th District, Dekalb County, Georgia, and being more particularly described as follows:

Beginning at an X mark found at the intersection of the Easterly right-of-way of Birch Road (60 foot right-of-way) with the Southerly right-of-way of North Druid Hills Road (100 foot right-of-way); thence along said right-of-way of North Druid Hills Road South 70 degrees 28 minutes 40 seconds East, a distance of 233.65 feet to a 5/8 inch rebar set; thence leaving said right-of-way South 19 degrees 08 minutes 30 seconds West, a distance of 140.15 feet to a 5/8 inch rebar set; thence South 12 degrees 24 minutes 24 seconds West, a distance of 52.60 feet to a 1/2 inch rebar found; thence North 72 degrees 13 minutes 06 seconds West, a distance of 236.14 feet to a 1/2 inch rebar found on the Easterly right-of-way of Birch Road; thence along said right-of-way North 18 degrees 08 minutes 19 seconds East, a distance of 119.69 feet to a nail found; thence North 17 degrees 57 minutes 53 seconds East, a distance of 79.90 feet to an X mark found, said point being the True Point of Beginning.

Said tract of land contains 1.047 Acres.



(CLERK OF COURT RECORDING INFORMATION)



CLOSURE STATEMENT

THE FIELD CLOSURE UPON WHICH THIS PLAN IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 149,225, AND WAS ADJUSTED USING THE LEAST SQUARES METHOD. A TRIMBLE S-9 TOTAL STATION AND TRIMBLE TSC-3 DATA COLLECTOR WERE USED TO COLLECT THIS FIELD DATA.
THIS PLAN HAS BEEN CALCULATED FOR CLOSURE AND WAS FOUND TO BE ACCURATE WITHIN ONE FOOT IN 699,297 FEET, 1/10" INT.

IF YOU DIG

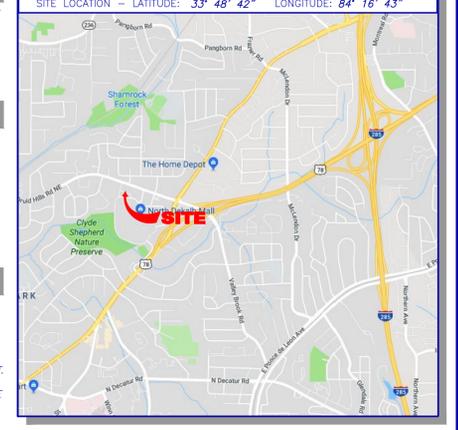


Know what's below.
Call before you dig.
Dial 811
Or Call 800-282-7411

ZONING

TRACT ONE IS ZONED "NS" (NEIGHBORHOOD SHOPPING) AS SHOWN IN A ZONING LETTER FROM DEKALB COUNTY DATED MARCH 8, 2021. THE MINIMUM YARD SETBACKS ARE:
FRONT (THOROUGHFARE & ARTERIAL) - 60 FEET MAXIMUM, 10 FEET MINIMUM;
FRONT (OTHER) - 60 FEET MAXIMUM, 5 FEET MINIMUM;
SIDE (INTERIOR) - 20 FEET; SIDE (CORNER LOT) - 15 FEET; REAR - 20 FEET.
TRACT TWO IS ZONED "C-1" (LOCAL COMMERCIAL DISTRICT) AS SHOWN ON THE ZONING MAP OF DEKALB COUNTY; THE MINIMUM YARD SETBACKS ARE:
FRONT (THOROUGHFARE & ARTERIAL) - 60 FEET MAXIMUM, 20 FEET MINIMUM;
FRONT (OTHER) - 60 FEET MAXIMUM, 10 FEET MINIMUM;
SIDE (INTERIOR) - 15 FEET; SIDE (CORNER LOT) - 30 FEET; REAR - 20 FEET.
PLEASE NOTE: ZONING AND SETBACKS SHOULD BE CONFIRMED AND VERIFIED BY PLANNING AND ZONING PRIORITY TO DESIGN OR CONSTRUCTION ACTIVITIES.

VICINITY MAP



GENERAL NOTES

THIS SURVEY HAS BEEN PREPARED FOR THE EXCLUSIVE USE OF THE PERSON OR ENTITIES NAMED HEREON. NO EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE INFORMATION SHOWN HEREON IS TO BE EXTENDED TO ANY PERSONS OR ENTITIES OTHER THAN THOSE SHOWN HEREON.
REVISIONS LISTED ON THIS SURVEY APPLY ONLY TO THE SPECIFIC CHANGES REFERENCED, AND DO NOT CONSTITUTE AN UPDATE OF OTHER DATA ON THIS SURVEY. THE SURVEY DATE HEREON IS THE APPLICABLE DATE AS RELATED TO PROVISIONS OF STATUTES OF LIMITATION UNLESS SPECIFICALLY NOTED OTHERWISE.
THIS PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA BASED ON THE FLOOD INSURANCE RATE MAP FOR THIS AREA. THE MAP NUMBER FOR THIS AREA IS 13089C0067K, AND THE DATE OF SAID MAP IS AUGUST 15, 2019. THIS DETERMINATION WAS MADE BY GRAPHICALLY DETERMINING THE POSITION OF THIS SITE ON SAID FIRM MAPS UNLESS OTHERWISE NOTED.
PLEASE NOTE: TREES 4-INCH DBH (DIAMETER AT BREAST HEIGHT) AND LARGER WERE LOCATED FOR THIS SURVEY.
RIGHT-OF-WAY LINES SHOWN ON THIS SURVEY THAT ARE NOT ACTUAL BOUNDARIES OF THE SUBJECT TRACT(S) ARE DEPICTED GRAPHICALLY AND ARE SHOWN APPROXIMATELY FOR INFORMATIONAL PURPOSES ONLY. SAID RIGHT-OF-WAY LINES SHOULD NOT BE UTILIZED FOR DESIGN PURPOSES.
THE DATUM FOR THIS SITE WAS ESTABLISHED UTILIZING GLOBAL POSITIONING SYSTEMS, AND BASED ON POSITIONAL VALUES FOR THE VIRTUAL REFERENCE STATION NETWORK DEVELOPED BY eGPS SOLUTIONS. THE HORIZONTAL REFERENCE FRAME IS NORTH AMERICAN DATUM OF 1983(2011)-STATE PLANE COORDINATE SYSTEM OF GEORGIA-WEST ZONE. THE VERTICAL REFERENCE FRAME IS NORTH AMERICAN VERTICAL DATUM OF 1988. ANY DIRECTIONS OR DIMENSIONS SHOWN ARE A RECTANGULAR, GROUND LEVEL PROJECTION OF THE STATE PLANE COORDINATE SYSTEM.
NO EVIDENCE OF THE SITE BEING USED AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL WAS OBSERVED DURING THE TIME FIELD WORK WAS PERFORMED ON THE SUBJECT PARCEL.
ALL MATTERS SHOWN ON RECORDED PLATS PROVIDED TO THE SURVEYOR ARE SHOWN ON THE SURVEY.
AT THE DATE OF THIS SURVEY, THE SUBJECT PROPERTY HAD ACCESS TO AND FROM A DULY DEDICATED PUBLIC RIGHT-OF-WAY, NORTH DRUID HILLS ROAD AND BIRCH ROAD. THE SURVEYOR MAKES NO CERTIFICATION AS TO WHETHER OR NOT THESE ACCESS POINTS HAVE BEEN APPROVED OR PERMITTED BY JURISDICTIONAL AUTHORITIES.
THE SUBJECT PROPERTY IS CONTIGUOUS WITH ADJACENT RIGHT-OF-WAYS WITHOUT GAPS, GORES, OR OVERLAPS.
NO VISIBLE ABOVE-GROUND ENCROACHMENTS WERE OBSERVED AT THE DATE OF SURVEY.
ALTA CERTIFICATION TABLE "A" NOTES:
Item 16 - No evidence of current earth moving work, building construction or building additions was observed at the date of survey.
Item 17 - No evidence was observed indicating changes in street right of way lines either completed or proposed.
SURVEY REFERENCES
1> ALTA/NSPS LAND TITLE SURVEY OF NORTH DEKALB MALL, PREPARED BY GEOSURVEY, LTD., DATED DECEMBER 15, 2021. (JOB NO. 20175643)

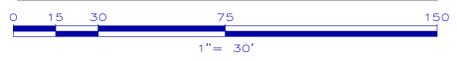
SITE PHOTOGRAPHS



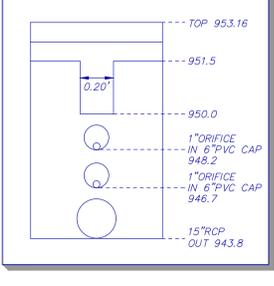
LEGEND

| STANDARD ABBREVIATIONS | STANDARD SYMBOLS |
|---------------------------------|----------------------------------|
| AC AIR CONDITIONER | ⊕ OVERHEAD TRAFFIC SIGNAL LIGHT |
| BH BORE HOLE | ⊕ POWER POLE |
| BSL BUILDING SETBACK LINE | — GUY WIRE |
| CI CURB INLET | — POWER LINE |
| CMP CORRUGATED METAL PIPE | ⊕ LIGHT POLE |
| CMF CONCRETE MONUMENT FND | ⊕ ELECTRIC TRANSFORMER |
| CO SANITARY CLEANOUT | ⊕ WATER VAULT |
| CPD COMMUNICATION PEDESTAL | ⊕ GAS VALVE |
| CTP CRIMPED TOP PIPE | ⊕ GAS METER |
| DI DROP INLET | ⊕ WATER VALVE |
| DIP DUCTILE IRON PIPE | ⊕ WATER METER |
| DWBC DOUBLE WING CATCH BASIN | ⊕ FIRE HYDRANT |
| FNC FENCE | — UNDERGROUND GAS LINE |
| GM GAS METER | — UNDERGROUND COMMUNICATION LINE |
| FND FOUND | — UNDERGROUND WATER LINE |
| GM GAS METER | ⊕ PHOTO POSITION INDICATOR |
| INV INVERT | ⊕ REGULAR PARKING SPACE COUNT |
| JB JUNCTION BOX | ⊕ HANDICAP PARKING SPACE |
| MB MANHOLE | ⊕ TREE POSITION INDICATOR |
| OCS OUTLET CONTROL STRUCTURE | |
| OPN OPEN TOP PIPE | |
| PM POWER METER | |
| POB POINT OF BEGINNING | |
| POC POINT OF COMMENCEMENT | |
| RCP REINFORCED CONCRETE PIPE | |
| RFB 5/8" RFB FND CAPPED LSF 621 | |
| RFR IRON REINFORCING BAR | |
| RBS 5/8" RBS SET CAPPED LSF 621 | |
| SS SANITARY SEWER | |
| SWB SINGLE WING CATCH BASIN | |
| TRANS ELECTRIC TRANSFORMER | |

GRAPHIC SCALE



OCS DETAIL



N/F PROPERTY OF
MIDTOWN NATIONAL GROUP, LP
DEED BOOK 225963 / PAGE 770
DEED BOOK 26135 / PAGE 636
DEED BOOK 26453 / PAGE 394

TRACT ONE
1.047 Acres
45,590 sf
ZONED NS

N/F PROPERTY OF
LCI-SVAP NDM JV, LP
DEED BOOK 24380 / PAGE 239
DEED BOOK 24380 / PAGE 244

TRACT TWO
1.438 Acres
62,662 sf
ZONED C-1

TOTAL SITE AREA
2.485 Acres
108,252 sf

SURVEYOR CERTIFICATION (ALTA/NSPS)

To: Chick-fil-A, Inc.
Fidelity National Title Insurance Company
This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 6(a), 6(b), 7(a), 7(b-1), 8, 9, 11, 13, 16, 17, & 19 of Table A thereof. The field work was completed on March 8, 2021.
Date: March 8, 2021



SURVEYOR CERTIFICATION (GEORGIA)

This plat is a retracement of an existing parcel or parcels of land and does not subdivide or create a new parcel or make any changes to any real property boundaries. The recording information of the documents, maps, plats, or other instruments which created the parcel or parcels are stated herein. RECORDATION OF THIS PLAT DOES NOT IMPLY APPROVAL OF ANY LOCAL JURISDICTION, AVAILABILITY OF PERMITS, COMPLIANCE WITH LOCAL REGULATIONS OR REQUIREMENTS, OR SUITABILITY FOR ANY USE OR PURPOSE OF THE LAND. Furthermore, the undersigned land surveyor certifies that this plat complies with the minimum technical standards for property surveys in Georgia as set forth in the rules and regulations of the Georgia Board of Registration for Professional Engineers and Land Surveyors and as set forth in O.C.G.A. Section 15-6-67.
John T. Newman
Georgia Professional Land Surveyor # 3324

1 SHEET
OF
2



Land Surveying • 3D Laser Scanning
1660 Barnes Mill Road
Marietta, Georgia 30062
Phone: (770) 795-9900
Fax: (770) 795-8880
www.geosurvey.com
EMAIL: info@geosurvey.com
Certificate of Authorization #LSF-000621

| ALTA/NSPS LAND TITLE SURVEY | | |
|---|--------------------------|-------------------------------|
| 3795 North Druid Hills Rd & 2692 Sweet Briar Rd | | |
| FOR | | |
| Chick-fil-A, Inc. | | |
| Fidelity National Title Insurance Company | | |
| ES JOB NO: 20175643 | DRAWING SCALE: 1" = 30' | SURVEY DATE: 03-08-2021 |
| FIELD WORK: ZM | CITY: UNINCORPORATED | REVISIONS (SEE GENERAL NOTES) |
| PROJ MGR: JTN | COUNTY: DEKALB STATE: GA | No. Date Description |
| REVIEWED: JRC | LAND LOT: 100 | 1. 3-12-21 Add zoning letter |
| DWG FILE: 20175643-02.dwg | DISTRICT: 18TH | |

TITLE EXCEPTIONS

THE FOLLOWING EXCEPTIONS ARE LISTED IN SCHEDULE B, SECTION 2, OF A COMMITMENT FOR TITLE INSURANCE, AS PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, INSURANCE NO. 2018199A, EFFECTIVE DATE OCTOBER 26, 2020.
13. Easements from T.C. Holms to Georgia Power Company as follows:
a. Dated January 4, 1953, filed August 4, 1953, Recorded in Deed Book 985, Page 486, aforesaid records.
MAY AFFECT SITE - BLANKET EASEMENT WITH VAGUE DESCRIPTION - NOT PLOTTABLE
b. Dated December 3, 1954, filed January 4, 1955, Recorded in Deed Book 1080, Page 398, aforesaid records.
AFFECTS SITE - BLANKET EASEMENT - NOT PLOTTABLE
14. Right of Way Deed from Beech-Nut, Inc. to DeKalb County, dated July 28, 1969, filed August 6, 1969, Recorded in Deed Book 2445, Page 324, aforesaid records.
AFFECTS SITE - BLANKET EASEMENT - NOT PLOTTABLE
15. Right of Way Easement from City Ice Delivery Company to Georgia Power Company, dated October 13, 1969, filed November 13, 1969, Recorded in Deed Book 2481, Page 139, aforesaid records.
AFFECTS SITE - BLANKET EASEMENT - NOT PLOTTABLE
16. Right of Way Easement from Dobbs Houses, Division of Beech-Nut, Inc. to Georgia Power Company, dated September 20, 1969, filed November 13, 1969, Recorded in Deed Book 2481, Page 89, aforesaid records.
AFFECTS 3809 NORTH DRUID HILLS ROAD - BLANKET EASEMENT - NOT PLOTTABLE
17. Right of Way Easement from Dobbs Houses, Inc. to Georgia Power Company, dated December 9, 1969, filed January 30, 1970, Recorded in Deed Book 2501, Page 365, aforesaid records.
AFFECTS 3809 NORTH DRUID HILLS ROAD - BLANKET EASEMENT - NOT PLOTTABLE
18. Stormwater Detention Facility Inspection and Maintenance Agreement by and between Hendon Columbia, LLC and DeKalb County, Georgia, executed December 17, 2010, filed December 21, 2010, Recorded in Deed Book 22282, Page 388, aforesaid records.
AFFECTS SURVEY TRACT TWO - BLANKET EASEMENTS & RESTRICTIONS - NOT PLOTTABLE
19. All matters affecting subject property as shown on the following plats, all aforesaid records.
(A) Plat Book 24, Page 14 (Fee Simple); NO EASEMENTS AFFECTING SITE DEPICTED ON DOCUMENT
(B) Plat Book 219, Page 113 (Easement Parcel 1); NO EASEMENTS AFFECTING SITE DEPICTED ON DOCUMENT
(C) Plat Book 221, Page 52 (Easement Parcel 2); NO EASEMENTS AFFECTING SITE DEPICTED ON DOCUMENT
As to Fee Parcel:
20. Memorandum of Lease by and between Citizens and Southern Trust Company (Georgia), N.A., as Trustees, et al, Romar Joint Venture and Pier 1 Imports (U.S.), Inc., a Delaware corporation, dated May 7, 1990, filed June 18, _____ and recorded in Deed Book 6727, Page 256, aforesaid records.
NOT A SURVEY MATTER
21. Easements as contained in that certain Right of Way Deed from O.S. Cofer to DeKalb County, Georgia, dated July 5, 1944, filed August 31, 1944 and recorded in Deed Book 606, Page 33, aforesaid records.
AFFECT SITE - BLANKET EASEMENT FOR DRAINAGE - NOT PLOTTABLE
22. Easements as contained in that certain Right of Way Deed from Robert C. Crim to DeKalb County, a political subdivision of the State of Georgia, dated October _____, 1988, filed October 18, 1988 and recorded in Deed Book 6270, Page 79, aforesaid records.
DOES NOT AFFECT SITE
As to Easement Parcel 2:
23. Assignment and Assumption of Declaration of Easements, Covenants and Restrictions among Hendon Columbia, LLC, and LG-SVAP NDM JV, LP, a Delaware limited liability company, dated May 9, 2014, filed May 15, 2014 and recorded in Deed Book 24380, Page 247, aforesaid records, as it affects that certain Declaration of Easements, Covenants and Restrictions by Hendon Columbia, LLC, a Georgia limited liability company, dated October 31, 2011, filed November 7, 2011 and recorded in Deed Book 22714, Page 748, aforesaid records.
AFFECTS SITE AS SHOWN

UTILITY NOTE

THE UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON LOCATION OF MARKINGS PROVIDED BY:

SUBSURFACE UTILITY INVESTIGATIONS, LLC
898 SWEET BRIAR TRAIL
CONYERS, GEORGIA 30094
(770) 557-4142

SUBSURFACE UTILITY INVESTIGATIONS, LLC UTILIZED SEVERAL TECHNIQUES INCLUDING, BUT NOT LIMITED TO, ELECTROMAGNETIC, MAGNETIC LOCATION FOR FERROUS METALS, ACOUSTIC AND PASSIVE FREQUENCIES TO DESIGNATE AND MARK BURIED UTILITIES ON THE SURFACE WITH PAINT AND FLAGS COVERING THE ENTIRE AREA OF THE PROJECT.

THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED, UNDERGROUND UTILITIES NOT OBSERVED OR LOCATED UTILIZING THIS TECHNIQUE MAY EXIST ON THIS SITE BUT NOT BE SHOWN, AND MAY BE FOUND UPON EXCAVATION. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE.

INFORMATION REGARDING MATERIAL AND SIZE OF UTILITIES IS BASED ON RECORDS ACQUIRED FROM THE UTILITY OWNERS.

PROPERTY DESCRIPTIONS

OVERALL PROPERTY DESCRIPTION

All that tract or parcel of land lying or being in Land Lot 100, 18th District, DeKalb County, Georgia, and being more particularly described as follows:

Beginning at an X mark found at the intersection of the Easterly right-of-way of Birch Road (60 foot right-of-way) with the Southerly right-of-way of North Druid Hills Road (100 foot right-of-way); thence along said right-of-way of North Druid Hills Road South 70 degrees 28 minutes 40 seconds East, a distance of 233.65 feet to a 5/8 inch rebar set; thence leaving said right-of-way South 19 degrees 08 minutes 30 seconds West, a distance of 140.15 feet to a 5/8 inch rebar set; thence South 12 degrees 24 minutes 24 seconds West, a distance of 52.60 feet to a 1/2 inch rebar found; thence South 12 degrees 22 minutes 11 seconds West, a distance of 30.67 feet to a 5/8 inch rebar found; thence South 71 degrees 24 minutes 15 seconds East, a distance of 160.12 feet to a 5/8 inch rebar found; thence South 11 degrees 56 minutes 08 seconds West, a distance of 109.33 feet to a 1/2 inch rebar found on the Northerly right-of-way of Sweet Briar Road (variable right-of-way); thence along said right-of-way North 79 degrees 52 minutes 39 seconds West, a distance of 400.37 feet to a 1/2 inch rebar found on the Easterly right-of-way of Birch Road; thence along said right-of-way North 09 degrees 14 minutes 08 seconds East, a distance of 86.03 feet to a 5/8 inch rebar found; thence North 17 degrees 25 minutes 03 seconds East, a distance of 109.86 feet to a 1/2 inch rebar found; thence North 18 degrees 08 minutes 19 seconds East, a distance of 119.69 feet to a nail found; thence North 17 degrees 57 minutes 53 seconds East, a distance of 79.90 feet to an X mark found, said point being the True Point of Beginning.

Said tract of land contains 2.485 Acres.

TRACT ONE PROPERTY DESCRIPTION

All that tract or parcel of land lying or being in Land Lot 100, 18th District, DeKalb County, Georgia, and being more particularly described as follows:

Beginning at an X mark found at the intersection of the Easterly right-of-way of Birch Road (60 foot right-of-way) with the Southerly right-of-way of North Druid Hills Road (100 foot right-of-way); thence along said right-of-way of North Druid Hills Road South 70 degrees 28 minutes 40 seconds East, a distance of 233.65 feet to a 5/8 inch rebar set; thence leaving said right-of-way South 19 degrees 08 minutes 30 seconds West, a distance of 140.15 feet to a 5/8 inch rebar set; thence South 12 degrees 24 minutes 24 seconds West, a distance of 52.60 feet to a 1/2 inch rebar found; thence North 72 degrees 13 minutes 06 seconds West, a distance of 236.14 feet to a 1/2 inch rebar found on the Easterly right-of-way of Birch Road; thence along said right-of-way North 18 degrees 08 minutes 19 seconds East, a distance of 119.69 feet to a nail found; thence North 17 degrees 57 minutes 53 seconds East, a distance of 79.90 feet to an X mark found, said point being the True Point of Beginning.

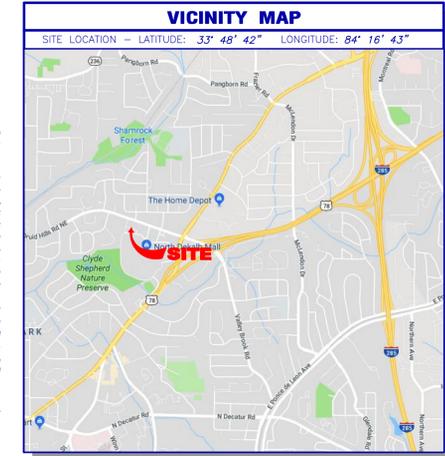
Said tract of land contains 1.047 Acres.

TRACT TWO PROPERTY DESCRIPTION

All that tract or parcel of land lying or being in Land Lot 100, 18th District, DeKalb County, Georgia, and being more particularly described as follows:

Commencing at an X mark found at the intersection of the Easterly right-of-way of Birch Road (60 foot right-of-way) with the Southerly right-of-way of North Druid Hills Road (100 foot right-of-way); thence along said right-of-way of Birch Road South 17 degrees 57 minutes 53 seconds West, a distance of 79.90 feet to a nail found; thence South 18 degrees 08 minutes 19 seconds West, a distance of 119.69 feet to a 1/2 inch rebar found, said point being the True Point of Beginning; thence leaving said right-of-way South 72 degrees 13 minutes 06 seconds East, a distance of 236.14 feet to a 1/2 inch rebar found; thence South 12 degrees 22 minutes 11 seconds West, a distance of 30.67 feet to a 5/8 inch rebar found; thence South 71 degrees 24 minutes 15 seconds East, a distance of 160.12 feet to a 5/8 inch rebar found; thence South 11 degrees 56 minutes 08 seconds East, a distance of 109.33 feet to a 1/2 inch rebar found on the Northerly right-of-way of Sweet Briar Road (variable right-of-way); thence along said right-of-way North 79 degrees 52 minutes 39 seconds West, a distance of 400.37 feet to a 1/2 inch rebar found on the Easterly right-of-way of Birch Road; thence along said right-of-way North 09 degrees 14 minutes 08 seconds East, a distance of 86.03 feet to a 5/8 inch rebar found; thence North 17 degrees 25 minutes 03 seconds East, a distance of 109.86 feet to a 1/2 inch rebar found, said point being the True Point of Beginning.

Said tract of land contains 1.438 Acres.



GENERAL NOTES

THIS SURVEY HAS BEEN PREPARED FOR THE EXCLUSIVE USE OF THE PERSON OR ENTITIES NAMED HEREON. NO EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE INFORMATION SHOWN HEREON IS TO BE EXTENDED TO ANY PERSONS OR ENTITIES OTHER THAN THOSE SHOWN HEREON.

REVISIONS LISTED ON THIS SURVEY APPLY ONLY TO THE SPECIFIC CHANGES REFERENCED, AND DO NOT CONSTITUTE AN UPDATE OF OTHER DATA ON THIS SURVEY. THE SURVEY DATE SHOWN HEREON IS THE APPLICABLE DATE AS RELATED TO PROVISIONS OF STATUTES OF LIMITATION UNLESS SPECIFICALLY NOTED OTHERWISE.

THIS PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA BASED ON THE FLOOD INSURANCE RATE MAP FOR THIS AREA. THE MAP NUMBER FOR THIS AREA IS 13089C0067K, AND THE DATE OF SAID MAP IS AUGUST 15, 2019. THIS DETERMINATION WAS MADE BY GRAPHICALLY DETERMINING THE POSITION OF THIS SITE ON SAID FIRM MAPS UNLESS OTHERWISE NOTED.

PLEASE NOTE: TREES 4-INCH DBH (DIAMETER AT BREAST HEIGHT) AND LARGER WERE LOCATED FOR THIS SURVEY.

RIGHT-OF-WAY LINES SHOWN ON THIS SURVEY THAT ARE NOT ACTUAL BOUNDARIES OF THE SUBJECT TRACT(S) ARE DEPICTED GRAPHICALLY AND ARE SHOWN APPROXIMATELY FOR INFORMATIONAL PURPOSES ONLY. SAID RIGHT-OF-WAY LINES SHOULD NOT BE UTILIZED FOR DESIGN PURPOSES.

THE DATUM FOR THIS SITE WAS ESTABLISHED UTILIZING GLOBAL POSITIONING SYSTEMS, AND BASED ON POSITIONAL VALUES FOR THE VIRTUAL REFERENCE STATION NETWORK DEVELOPED BY eGPS SOLUTIONS. THE HORIZONTAL REFERENCE FRAME IS NORTH AMERICAN DATUM OF 1983(2011)-STATE PLANE COORDINATE SYSTEM OF GEORGIA-WEST ZONE. THE VERTICAL REFERENCE FRAME IS NORTH AMERICAN VERTICAL DATUM OF 1988. ANY DIRECTIONS OR DIMENSIONS SHOWN ARE A RECTANGULAR, GROUND LEVEL PROJECTION OF THE STATE PLANE COORDINATE SYSTEM.

NO EVIDENCE OF THE SITE BEING USED AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL WAS OBSERVED DURING THE TIME FIELD WORK WAS PERFORMED ON THE SUBJECT PARCEL.

ALL MATTERS SHOWN ON RECORDED PLATS PROVIDED TO THE SURVEYOR ARE SHOWN ON THE SURVEY.

AT THE DATE OF THIS SURVEY, THE SUBJECT PROPERTY HAD ACCESS TO AND FROM A DULY DEDICATED PUBLIC RIGHT-OF-WAY, NORTH DRUID HILLS ROAD AND BIRCH ROAD. THE SURVEYOR MAKES NO CERTIFICATION AS TO WHETHER OR NOT THESE ACCESS POINTS HAVE BEEN APPROVED OR PERMITTED BY JURISDICTIONAL AUTHORITIES.

THE SUBJECT PROPERTY IS CONTIGUOUS WITH ADJACENT RIGHT-OF-WAYS WITHOUT GAPS, GORES, OR OVERLAPS.

NO VISIBLE ABOVE-GROUND ENCROACHMENTS WERE OBSERVED AT THE DATE OF SURVEY.

ALTA CERTIFICATION TABLE "A" NOTES:
Item 16 - No evidence of current earth moving work, building construction or building additions was observed at the date of survey.
Item 17 - No evidence was observed indicating changes in street right of way lines either completed or proposed.

SURVEY REFERENCES
1> ALTA/NSPS LAND TITLE SURVEY OF NORTH DEKALB MALL, PREPARED BY GEOSURVEY, LTD., DATED DECEMBER 15, 2021. (JOB NO. 20175643)

CLOSURE STATEMENT

THE FIELD CLOSURE UPON WHICH THIS PLAT IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 149,226, AND WAS ADJUSTED USING THE LEAST SQUARES METHOD. A TRIMBLE S-6 TOTAL STATION AND TRIMBLE TSC-3 DATA COLLECTOR WERE USED TO COLLECT THIS FIELD DATA.

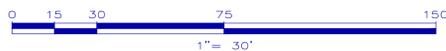
THIS PLAT HAS BEEN CALCULATED FOR CLOSURE AND WAS FOUND TO BE ACCURATE WITHIN ONE FOOT IN 699,292 FEET. JDL INT.

IF YOU DIG



Know what's below.
Call before you dig.
Dial 811
Or Call 800-282-7411

GRAPHIC SCALE



N/F PROPERTY OF
MIDTOWN NATIONAL GROUP, LP
DEED BOOK 225963 / PAGE 770
DEED BOOK 26135 / PAGE 636
DEED BOOK 26453 / PAGE 394

TRACT ONE
1.047 Acres
45,590 sf
ZONED NS

LCI-SVAP NDM JV, LP
DEED BOOK 24380 / PAGE 239
DEED BOOK 24380 / PAGE 244

TRACT TWO
1.438 Acres
62,662 sf
ZONED C-1

TOTAL SITE AREA
2.485 Acres
108,252 sf



Land Surveying • 3D Laser Scanning

1660 Barnes Mill Road
Marietta, Georgia 30062

Phone: (770) 795-9900
Fax: (770) 795-8880

www.geosurvey.com
EMAIL: info@geosurvey.com
Certificate of Authorization #LSF-000621

2 SHEET
OF
2

ALTA/NSPS LAND TITLE SURVEY

3795 North Druid Hills Rd & 2692 Sweet Briar Rd

FOR

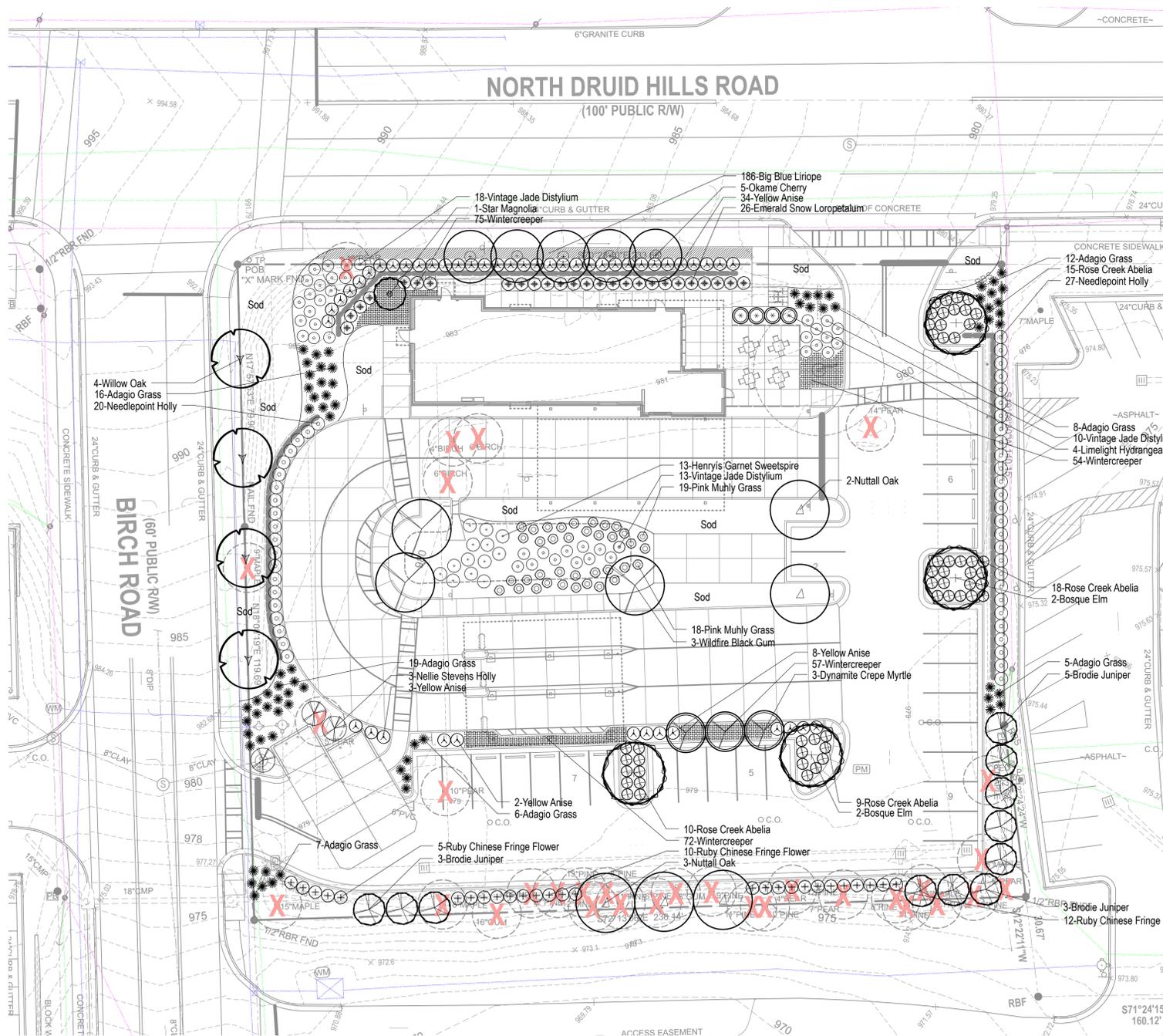
Chick-fil-A, Inc.

Fidelity National Title Insurance Company

| | | | | | |
|-------------|-----------------|----------------|----------------|-------------------------------|-------------------|
| GS JOB NO: | 20175643 | DRAWING SCALE: | 1"= 30' | SURVEY DATE: | MARCH 2, 2021 |
| FIELD WORK: | ZM | CITY: | UNINCORPORATED | REVISIONS (SEE GENERAL NOTES) | |
| PROJ MGR: | JTN | COUNTY: | DEKALB | STATE: | GA |
| REVIEWED: | JRC | LAND LOT: | 100 | No. Date Description | |
| DWG FILE: | 20175643-02.dwg | DISTRICT: | 18TH | 1. 3-12-21 | Add zoning letter |



EXHIBIT E



PLANT LIST

| Qty | Botanical Name | Common Name | Scheduled Size | Remarks |
|---------------------|------------------------------------|---------------------------|---------------------------|-------------------------------|
| Trees | | | | |
| 3 | Ilex x Nellie R Stevens | Nellie Stevens Holly | 5'-6" Hgt. B&B | |
| 11 | Juniperus virginiana 'Brodie' | Brodie Juniper | 8'-10' Hgt. | |
| 3 | Lagerstroemia indica 'Whit II' | Dynamite Crepe Myrtle | 7'-8' Hgt. | |
| 1 | Magnolia stellata | Star Magnolia | 6'-8' Hgt. | |
| 3 | Nyssa sylvatica 'Wildfire' | Wildfire Black Gum | 3" Cal.; 10' Hgt. | B & B; single straight leader |
| 5 | Prunus 'Okame' | Okame Cherry | 2" Cal.; 10' Hgt. Minimum | |
| 5 | Quercus nuttallii | Nuttall Oak | 3" Cal.; 10' Hgt. | B & B; single straight leader |
| 4 | Quercus phellos | Willow Oak | 3" Cal.; 10' Hgt. | B & B; single straight leader |
| 4 | Ulmus parvifolia 'Bosque' | Bosque Elm | 3" Cal.; 10' Hgt. | B & B |
| Shrubs | | | | |
| 52 | Abelia x chinensis 'Rose Creek' | Rose Creek Abelia | 3 Gal. | |
| 41 | Distylium 'Vintage Jade' | Vintage Jade Distylium | 3 Gal. | |
| 4 | Hydrangea paniculata 'Limelight' | Limelight Hydrangea | 3 Gal. | |
| 47 | Ilex cornuta 'Needlepoint' | Needlepoint Holly | 3 Gal. | |
| 47 | Illicium parviflorum | Yellow Anise | 3 Gal. | |
| 13 | Itea virginica 'Henry's Garnet' | Henry's Garnet Sweetspire | 3 Gal. | |
| 27 | Loropetalum chinense 'Ruby' | Ruby Loropetalum | 3 Gal. - 24"-36" Hgt. | |
| 26 | Loropetalum chinense 'Shang White' | Emerald Snow Loropetalum | 3 Gal. | |
| 73 | Miscanthus sinensis 'Adagio' | Adagio Grass | 3 Gal. | |
| 37 | Muhlenbergia capillaris | Pink Muhly Grass | 3 Gal. | |
| Groundcovers | | | | |
| 258 | Euonymus coloratus | Wintercreeper | 1 Gal. | Plant 18" O.C. |
| 186 | Liriope muscari 'Big Blue' | Big Blue Liriope | 1 Gal. | Plant 18" O.C. |
| Other | | | | |

NOTE:
This Landscape Plan is Preliminary in nature and is subject to change

LANDSCAPE NOTES

SOUTHEAST

- Landscape Contractor to read and understand the Landscape Specifications (sheet L-102) prior to finalizing bids. The Landscape Specifications shall be adhered to throughout the construction process.
- Contractor is responsible for locating and protecting all underground utilities prior to digging.
- Contractor is responsible for protecting existing trees from damage during construction.
- All tree protection devices to be installed prior to the start of land disturbance, and maintained until final landscaping.
- All tree protection areas to be protected from sedimentation.
- All tree protection fencing to be inspected daily, and repaired or replaced as needed.
- No parking, storage or other construction activities are to occur within tree protection areas.
- All planting areas shall be cleaned of construction debris (ie. concrete, rock, rubble, building materials, etc) prior to adding and spreading of the topsoil.
- General Contractor is responsible for adding a min of 4" clean friable topsoil in all planting beds and all grassed areas. Graded areas to be held down the appropriate elevation to account for topsoil depth. See Landscape Specifications for required topsoil characteristics.
- In all parking lot islands, the General Contractor is responsible to remove all debris, fracture/loosen subgrade to a min. 24" depth. Add topsoil to a 6"-8" bermed height above island curbing; refer to landscape specifications and landscape island detail.
- Prior to beginning work, the Landscape Contractor shall inspect the subgrade, general site conditions, verify elevations, utility locations, irrigation, approve topsoil provided by the General Contractor and observe the site conditions under which the work is to be done. Notify the General Contractor of any unsatisfactory conditions, work shall not proceed until such conditions have been corrected and are acceptable to the Landscape Contractor.
- Any deviations from the approved set of plans are to be approved by the Landscape Architect.
- Landscaping shall be installed in conformance with ANSI Z60.1 the "American Standard for Nursery Stock" and the accepted standards of the American Association of Nurserymen.
- Existing grass in proposed planting areas shall be killed and removed. Hand rake to remove all rocks and debris larger than 1 inch in diameter, prior to adding topsoil and planting shrubs.
- Soil to be tested to determine fertilizer and lime requirements prior to laying sod.
- Annual and perennial beds: add min. 4 inch layer of organic material and till to a min. depth of 12 inches. Mulch annual and perennial beds with 2-3 inch depth of mini nuggets.
- All shrubs beds (existing and new) to be mulched with a min. 3 inch layer of mulch (double shredded hardwood mulch).
- Planting holes to be dug a minimum of twice the width of the root ball, for both shrub and tree. Set plant material 2-3" above finish grade. Backfill planting pit with topsoil and native excavated soil. Set plant material 2-3" above finish grade. Backfill planting pit with topsoil and native excavated soil.
- Sod to be delivered fresh (Cut less than 24 hours prior to arriving on site), laid immediately, rolled, and watered thoroughly immediately after planting. Edge of sod at planting beds are to be "V" trenched; see Landscape Details.
- Any existing grass disturbed during construction to be fully removed, regraded and replaced. All tire marks and indentations to be repaired.
- Water thoroughly twice in first 24 hours and apply mulch immediately.
- The Landscape Contractor shall guarantee all plants installed for one full year from date of acceptance by the owner. All plants shall be alive and at a vigorous rate of growth at the end of the guarantee period. The Landscape Contractor shall not be responsible for acts of God or vandalism. See Landscape Specifications for Warranty requirements/expectations.
- Any plant that is determined dead, in an unhealthy, unsightly condition, lost its shape due to dead branches, or other symptoms of poor, non-vigorous growth, shall be replaced by the Landscape Contractor. See Landscape Specifications for warranty requirements/expectations.
- Site to be 100% irrigated in all planting beds and grass area by an automatic underground irrigation system. See Irrigation Plan L-200 for design. Irrigation as-built shall be provided to the Landscape Architect within 24 hours of irrigation install completion.
- Stake all evergreen and deciduous trees as shown in the planting detail and as per the Landscape Specifications.
- Remove stakes and guying from all trees after one year from planting.

LEGEND

- EXISTING TREE TO BE REMOVED
- EXISTING TREE TO REMAIN
- TREE PROTECTION FENCING



Chick-fil-A

5200 Buffington Road
Atlanta, Georgia 30349-2998



770.442.8171 tel
770.442.1123 fax

Manley Land Design, Inc.
51 Old Canton Street
Alpharetta, Georgia 30009

manleylanddesign.com



CHICK-FIL-A
NORTH DRUID HILLS DTO
3795 North Druid Hills Road
Decatur, GA 30033

FSU# 4846

REVISION SCHEDULE
NO. DATE DESCRIPTION

MLD PROJECT # 2021062

PRINTED FOR

DATE 4.9.21

DRAWN BY MB

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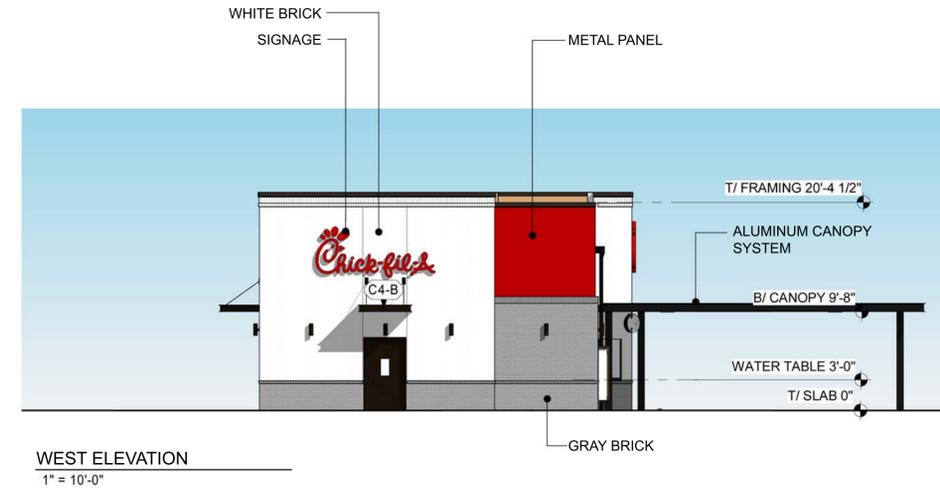
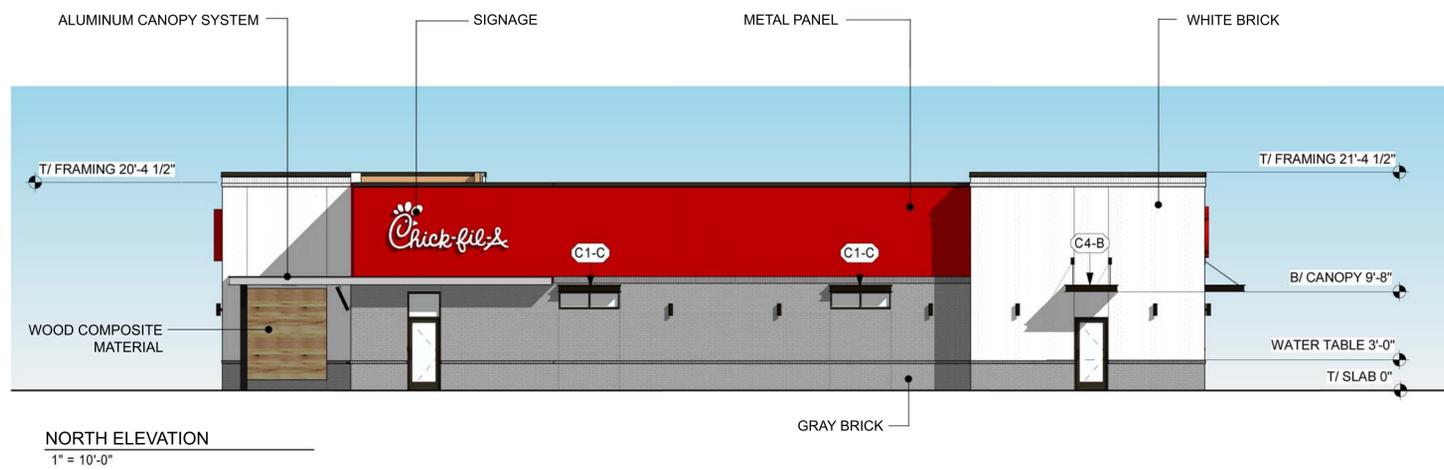
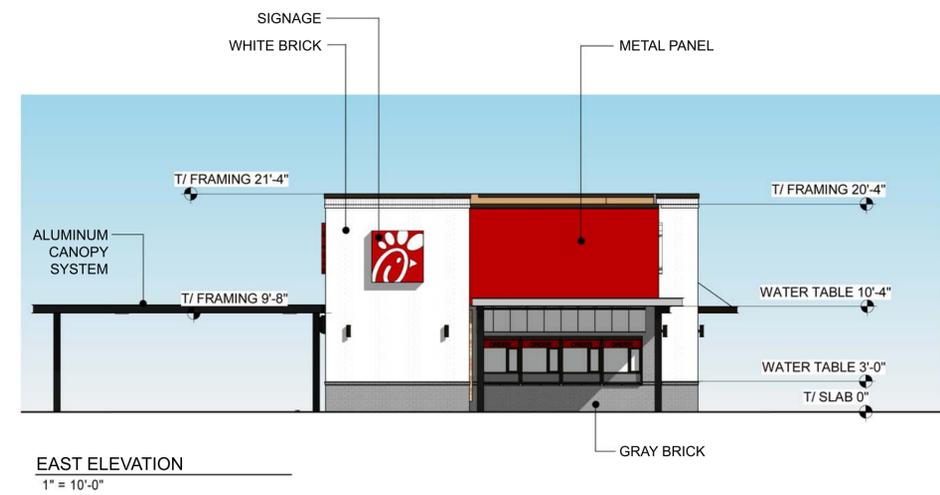
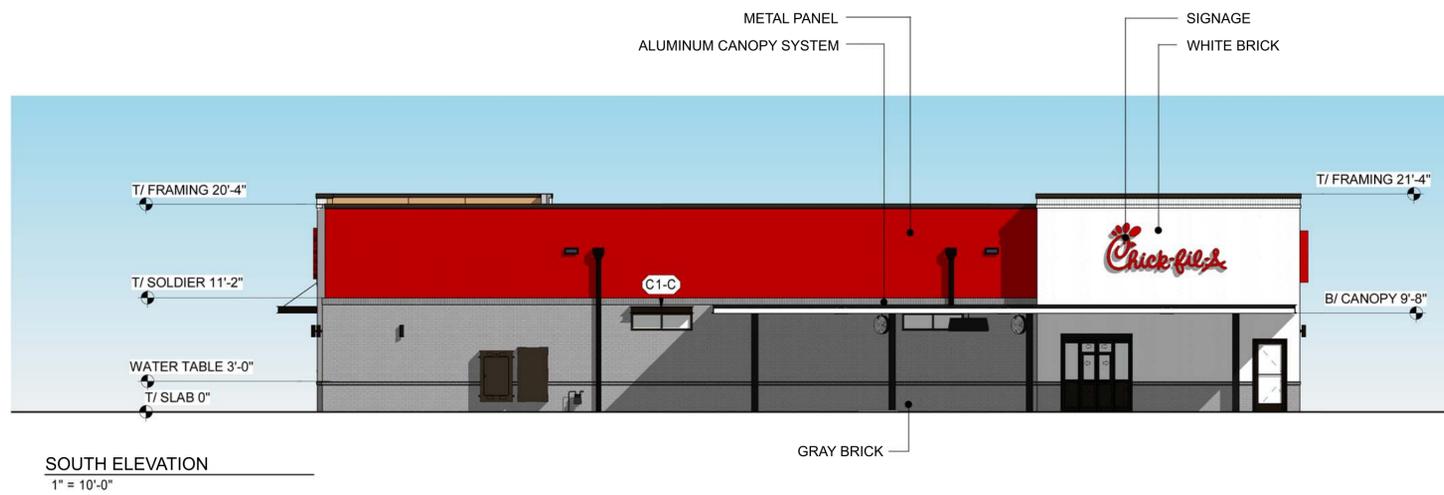
SHEET

Landscape Plan

SHEET NUMBER

L-100

EXHIBIT F

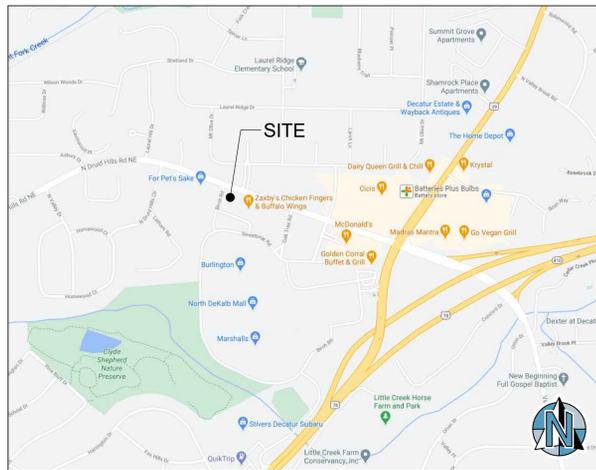


UPDATED PLANS

SUBMITTED BY APPLICANT ON NOVEMBER 17, 2021

| SITE DATA | |
|---|-------------------------|
| ZONING: | C-1 (LOCAL COMMERCIAL) |
| FUTURE LAND USE DESIGNATION: | TC (TOWN CENTER) |
| PARCEL IDENTIFICATION NUMBER: | 1810004019 |
| TOTAL SITE AREA: | 1.047 AC. |
| DISTURBED AREA: | 1.1 AC. |
| IMPERVIOUS SURFACE AREA MAXIMUM (%): | 0.942 AC. (90.0%) |
| IMPERVIOUS SURFACE AREA PROPOSED (%): | 0.738 AC. (70.4%) |
| OPEN SPACE AREA REQUIRED (%): | 0.105 AC. (10.0%) |
| OPEN SPACE AREA PROPOSED (%): | 0.321 AC. (30.6%) |
| FLOOR AREA RATIO MAXIMUM: | 20.00% |
| FLOOR AREA RATIO PROPOSED: | 6.14% |
| BUILDING HEIGHT PROPOSED: | 21' - 4" |
| BUILDING SETBACK - FRONT (BIRCH ROAD): | 20 FT MIN. / 60 FT MAX. |
| SIDE (N. DRUID HILLS RD.): | 30 FT |
| SIDE (INTERIOR): | 30 FT |
| REAR: | 20 FT |
| LANDSCAPE BUFFER - FRONT (BIRCH ROAD): | 10 FT |
| SIDE (N. DRUID HILLS RD.): | 5 FT |
| SIDE (INTERIOR): | 5 FT |
| REAR: | 5 FT |
| BUILDING FLOOR AREA: | 2,800 S.F. |
| PARKING RATIO REQUIRED - MAX: 1 SPACE PER 75 S.F. MIN: 1 SPACE / 150 S.F. = 38 SPACES | 19 SPACES |
| PARKING PROVIDED: | 29 SPACES |
| ACCESSIBLE PARKING REQUIRED: | 2 SPACES |
| ACCESSIBLE PARKING PROVIDED: | 2 SPACES |

- NOTES:
- THIS PLAN IS CONCEPTUAL IN NATURE AND SUBJECT TO CHANGE.
 - THIS PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA BASED ON THE FLOOD INSURANCE RATE MAP FOR THIS AREA. THE MAP NUMBER FOR THIS AREA IS 13089C0067K, AND THE DATE OF SAID MAP IS AUGUST 15, 2019.
 - NO STREAMS EXIST ON THE PROPERTY.



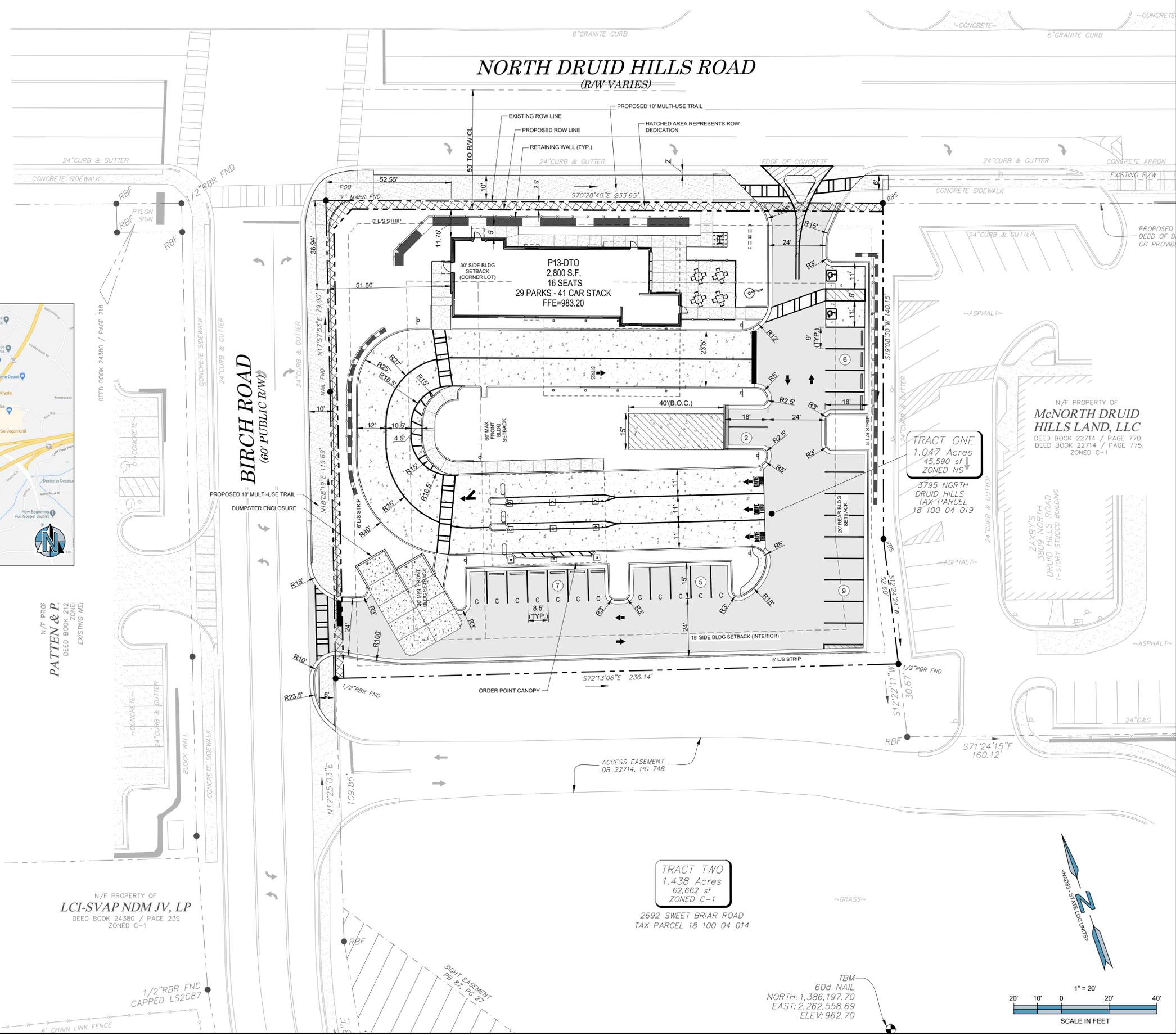
VICINITY MAP
NOT TO SCALE

N/F PROP
PATTEN & P.
DEED BOOK 212
ZONE
EXISTING MEI

N/F PROPERTY OF
LCI-SVAP NDM JV, LP
DEED BOOK 24380 / PAGE 239
ZONED C-1

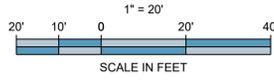


Know what's below.
Call before you dig.



TRACT ONE
1.047 Acres
45,590 sf
ZONED NS
3795 NORTH DRUID HILLS RD.
TAX PARCEL 18 100 04 019

TRACT TWO
1.438 Acres
62,662 sf
ZONED C-1
2692 SWEET BRIAR ROAD
TAX PARCEL 18 100 04 014



Chick-fil-A

5200 BUFFINGTON ROAD
ATLANTA, GA 30349-2998

DEVELOPER:
CHICK-FIL-A, INC.
5200 BUFFINGTON ROAD
ATLANTA, GA 30349-2998
(404) 808-1145
CONTACT: MR. JASON POCIASK

ENGINEER:
FORESITE group
Foresite Group, LLC. w | www.fg-inc.net
3740 Davinci Ct. o | 770.368.1399
Suite 100 f | 770.368.1944
Peachtree Corners, GA 30092

PROJECT:
3795 NORTH DRUID HILLS RD.
DECATUR, GA 30033
PARCEL #1810004019
FSR #04846



| REVISIONS | DATE |
|-----------------|------------|
| SITE NOTES | 2021.04.29 |
| CLIENT COMMENTS | 2021.06.25 |
| CLIENT COMMENTS | 2021.07.13 |
| CLIENT COMMENTS | 2021.09.08 |
| COUNTY COMMENTS | 2021.10.21 |
| COUNTY COMMENTS | 2021.11.17 |

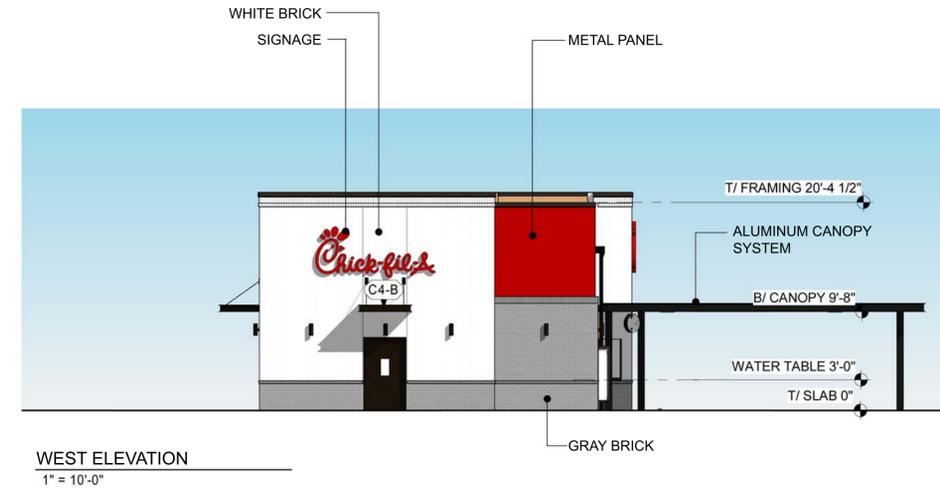
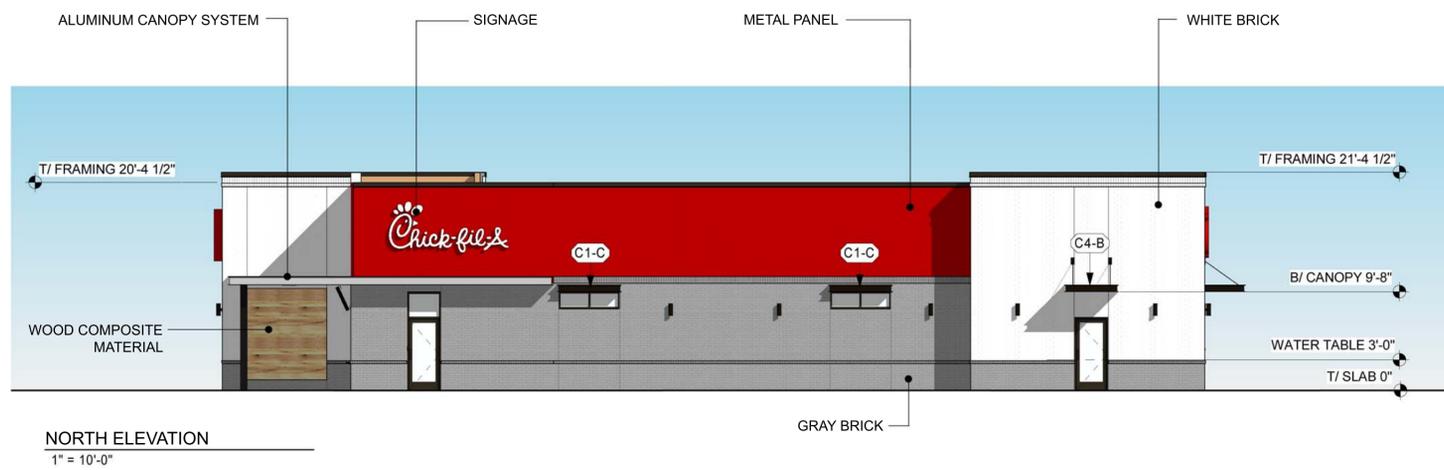
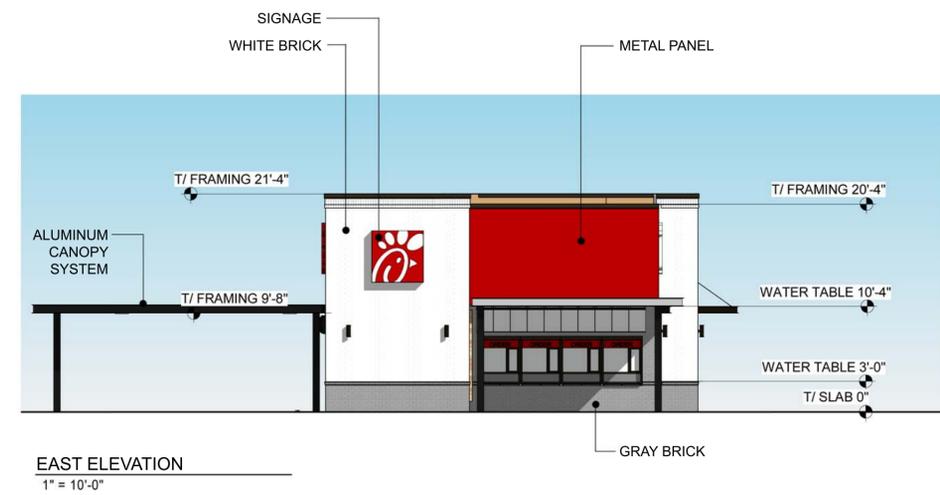
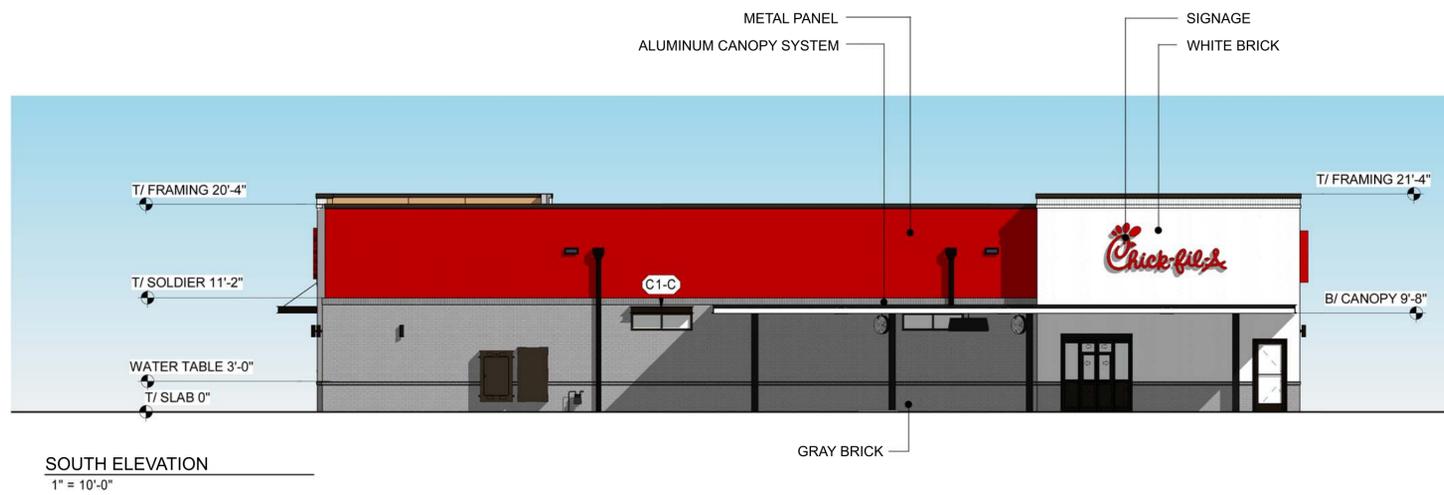
PROJECT MANAGER: JMJ
DRAWING BY: JRH
JURISDICTION: DEKALB COUNTY, GA
DATE: 2021-04-12
SCALE: 1" = 20'
TITLE:

PRELIMINARY SITE PLAN

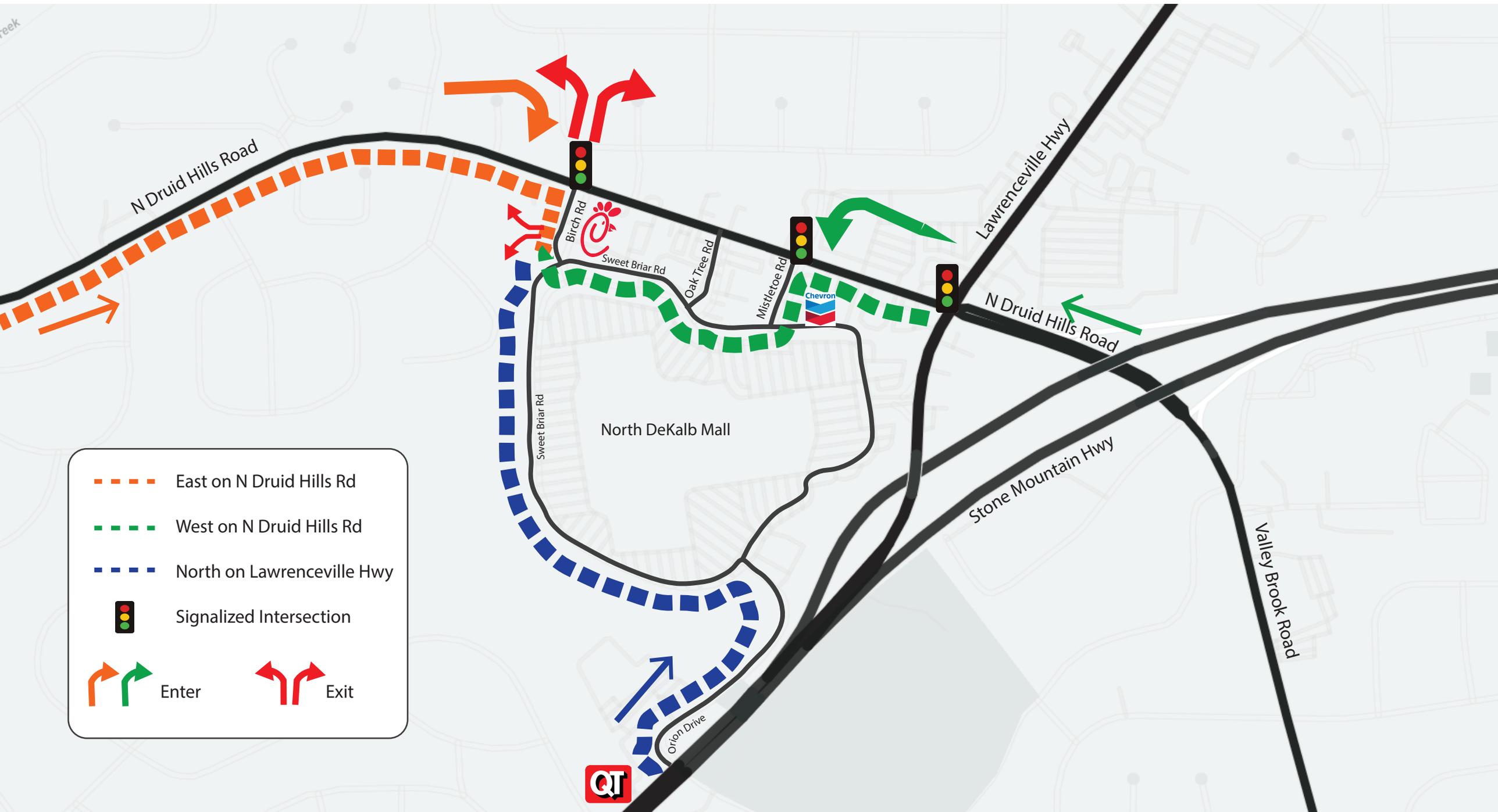
SHEET NUMBER:
C-2.0

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 397.010



Best ways to Chick-fil-A



- East on N Druid Hills Rd
- West on N Druid Hills Rd
- North on Lawrenceville Hwy
- 🚦 Signalized Intersection
- Enter (orange and green arrows)
- Exit (red arrows)





DEKALB COUNTY GOVERNMENT
PLANNING DEPARTMENT
DISTRIBUTION FORM

NOTE: PLEASE RETURN ALL COMMENTS VIA EMAIL OR FAX TO EXPEDITE THE PROCESS TO MICHELLE M ALEXANDER mmalexander@dekalbcountyga.gov OR JOHN REID jreid@DEKALBCOUNTYGA.GOV

COMMENTS FORM:
PUBLIC WORKS WATER AND SEWER

Case No.: Z-21-1244885

Parcel I.D. #: 18-100-04-019

Address: 3795 North Druid Hills Road

Decatur, Georgia

WATER:

Size of existing water main: 6" CI & 12" DI Water Main (adequate/inadequate)

Distance from property to nearest main: Adjacent to Property

Size of line required, if inadequate: N/A

SEWER:

Outfall Servicing Project: South Fork Peachtree Creek Basin

Is sewer adjacent to property: Yes (X) No () If no, distance to nearest line: _____

Water Treatment Facility: R. M. Clayton WTF () adequate () inadequate

Sewage Capacity: * (MGPD)

Current Flow: 127 (MGPD)

COMMENTS:

* Please note that the sewer capacity has not been reviewed or approved for this project. A Sewer Capacity Request (SCR) must be completed and submitted for review. This can be a lengthy process and should be addressed early in the process.

SCR submitted 06/02/21 still processing.
A Jayson

Signature: [Signature]

Zoning Comments

N1 & N2 (Z-21-1244885 & SLUP-21-1244886) - North Druid Hills is classified as a major arterial. Required to add a left turn lane onto Birch. Drive on North Druid Hills limited to Right in/right out only. Please see chapter 5 of the zoning code and chapter 14-190 of the land development code for infrastructure requirements. Requires 10 foot landscape strip, bike lanes and 6 foot sidewalks or 10 foot multiuse path (preferred), street lighting on back of sidewalk. Right of way dedication of 50 feet from centerline or such that all public infrastructure is within county right of way, whichever greater. Birch Road is classified as a local street. Requires a 27.5 foot right of way dedication from the centerline or such that all public infrastructure is on county right of way. Due to the proximity of the mall, potential for redevelopment and connectivity the residential areas- a 10 foot multiuse trail to be included in the sight design along Birch. Requires a 6 foot landscape strip. Streetlights required on back of path.

N3. (Z-21-1244892) Flakes Mill Road is classified as a minor arterial. Access point on Flakes Mill Road must meet intersection sight distance prior to permitting and verified prior to occupancy by the engineer of record. Please see chapter 5 of the zoning code and chapter 14-190 of the land development code for infrastructure requirements. Requires 10 foot landscape strip, bike lanes and 6 foot sidewalks or 10 foot multiuse path (preferred), street lighting on back of sidewalk. Right of way dedication of 40 feet from centerline or such that all public infrastructure is within county right of way, whichever greater. New residential streets will be local with a right of way of 55 feet, 24 feet of pavement, curb and gutter, 6 foot landscape strip, a 6 foot sidewalk, street lighting required behind sidewalk.

N4. (Z-21-1244893) Norman Road is classified as a collector road. Please see chapter 5 of the zoning code and chapter 14-190 of the land development code for infrastructure requirements. Requires 10 foot landscape strip, bike lanes and 6 foot sidewalks or 10 foot multiuse path (preferred), street lighting on back of sidewalk. Right of way dedication of 35 feet from centerline or such that all public infrastructure is within county right of way, whichever greater. New residential streets will be local with a right of way of 55 feet, 24 feet of pavement, curb and gutter, 6 foot landscape strip, a 6 foot sidewalk, street lighting required on back of sidewalk. Continue at least 2 traffic calming features (splitter islands) similar to the ones installed in the City of Clarkton along frontage.

N5. (SLUP-21-1244895) No comment

N6. (SLUP-21-1244899) No comment



Board of Health

06/21/2021

To: Mr. John Reid, Senior Planner
From: Ryan Cira, Environmental Health Manager
Cc: Alan Gaines, Technical Services Manager
Re: Rezone Application Review

General Comments:

DeKalb County Health Regulations prohibit use of on-site sewage disposal systems for

- multiple dwellings
- food service establishments
- hotels and motels
- commercial laundries
- funeral homes
- schools
- nursing care facilities
- personal care homes with more than six (6) clients
- child or adult day care facilities with more than six (6) clients
- residential facilities containing food service establishments

If proposal will use on-site sewage disposal, please contact the Land Use Section (404) 508-7900.

Any proposal, which will alter wastewater flow to an on-site sewage disposal system, must be reviewed by this office prior to construction.

This office must approve any proposed food service operation or swimming pool prior to starting construction.

Public health recommends the inclusion of sidewalks to continue a preexisting sidewalk network or begin a new sidewalk network. Sidewalks can provide safe and convenient pedestrian access to a community-oriented facility and access to adjacent facilities and neighborhoods.

For a public transportation route, there shall be a 5ft. sidewalk with a buffer between the sidewalk and the road. There shall be enough space next to sidewalk for bus shelter's concrete pad installation. Recommendation: Provide trash can with liner at each bus stop with bench and monitor for proper removal of waste.

Since DeKalb County is classified as a Zone 1 radon county, this office recommends the use of radon resistant construction.



Board of Health

- N.1 Z-21-1244885 2021-2678/18-100-04-019
District 02 Super District 06
3795 North Druid Hills Road, Decatur, GA 30033
Acres: 1.04
- Please review general comments.
 - NS to C-1
- N.2 SLUP-21-1244886 2021-2638/18-100-04-019
District 02 Super District 06
3795 North Druid Hills Road, Decatur, GA 30033
Acres: 1.04
- Please review general comments.
 - SLUP to allow drive through facility through in Town Center Character area.
- N.3 Z-21-1244892 2021-2640/12-253-03-002
District 03 Super District 07
5035 Flakes Mills Road, Ellenwood, GA 30294
Acres: 27
- Septic system installed on several surrounding properties in the past.
 - Please review general comments.
 - R-100 to R-60
- N.4 Z-21-1244893 2021-2641/18-095-03-005, 18-095-03-006, 18-095-03-008, 18-095-03-009, 18-095-03-090, 18-095-03-094
District 04 Super District 06
3943 Norman Road, Stone Mountain, GA 30083
Acres: 35
- Septic system installed on several surrounding properties in the past.
 - Please review general comments.
 - R-85 to RSM
- N.5 SLUP-21-1244895 2021-2641/15-137-03-028
District 03 Super Districts 06
2445 Candler Road, Decatur, GA 30032
Acres: 0.3
- Dental Building at time septic installed on 12/4/1962.
 - Please review general comments.
 - SLUP to Housing Facility



Board of Health

N.6 SLUP-21-1244899 2021/2643/15-084-05-068
District 03 Super District 06
3008 Rollingwood Lane, Atlanta, GA 30316
Acres: 0.35
- Septic system installed 8/19/1960.
- Please review general comments.

N.7 TA-21-1244945 2021-2644
Districts 03 & 05 Super District 07
- Please review general comments.

N.8 TA-21-1244999 2021-2645
Districts 03 & 05 Super District 07
- Please review general comments.



DEKALB COUNTY GOVERNMENT
PLANNING DEPARTMENT
DISTRIBUTION FORM

NOTE: PLEASE RETURN ALL COMMENTS VIA EMAIL OR FAX TO EXPEDITE THE PROCESS TO MICHELLE ALEXANDER mmalexander@dekalbcountvga.gov AND/OR LASONDRA HILL lahill@dekalbcountvga.gov

**COMMENTS FORM:
PUBLIC WORKS TRAFFIC ENGINEERING**

Case No.: 2-21-1244885 Parcel I.D. #: 18-100-04-019

Address: 3795
N. David Hills Rd
Decatur Ga

Adjacent Roadway (s):

(classification) (classification)

| | |
|--|--|
| Capacity (TPD) _____ | Capacity (TPD) _____ |
| Latest Count (TPD) _____ | Latest Count (TPD) _____ |
| Hourly Capacity (VPH) _____ | Hourly Capacity (VPH) _____ |
| Peak Hour. Volume (VPH) _____ | Peak Hour. Volume (VPH) _____ |
| Existing number of traffic lanes _____ | Existing number of traffic lanes _____ |
| Existing right of way width _____ | Existing right of way width _____ |
| Proposed number of traffic lanes _____ | Proposed number of traffic lanes _____ |
| Proposed right of way width _____ | Proposed right of way width _____ |

Please provide additional information relating to the following statement.

According to studies conducted by the Institute of Traffic Engineers (ITE) 6/7TH Edition (whichever is applicable), churches generate an average of fifteen (15) vehicle trip end (VTE) per 1, 000 square feet of floor area, with an eight (8%) percent peak hour factor. Based on the above formula, the _____ square foot place of worship building would generate _____ vehicle trip ends, with approximately _____ peak hour vehicle trip ends.

Single Family residence, on the other hand, would generate ten (10) VTE's per day per dwelling unit, with a ten (10%) percent peak hour factor. Based on the above referenced formula, the _____ (Single Family Residential) District designation which allows a maximum of _____ units per acres, and the given fact that the project site is approximately _____ acres in land area, _____ daily vehicle trip end, and _____ peak hour vehicle trip end would be generated with residential development of the parcel.

COMMENTS:

Field & plans reviewed. Nothing found that would interrupt traffic flow.

Signature: [Signature]

N-2



DEKALB COUNTY GOVERNMENT
PLANNING DEPARTMENT
DISTRIBUTION FORM

NOTE: PLEASE RETURN ALL COMMENTS VIA EMAIL OR FAX TO EXPEDITE THE PROCESS TO MICHELLE ALEXANDER mmalexander@dekalbcountyga.gov AND/OR LASONDRA HILL lahill@dekalbcountyga.gov

COMMENTS FORM:
PUBLIC WORKS TRAFFIC ENGINEERING

Case No.: SLUP-21-1244886 Parcel I.D. #: 18-100-04-019

Address: 3795
N. David Hill Rd
Decatur, GA

Adjacent Roadway (s):

(classification) (classification)

| | |
|--|--|
| Capacity (TPD) _____ | Capacity (TPD) _____ |
| Latest Count (TPD) _____ | Latest Count (TPD) _____ |
| Hourly Capacity (VPH) _____ | Hourly Capacity (VPH) _____ |
| Peak Hour Volume (VPH) _____ | Peak Hour Volume (VPH) _____ |
| Existing number of traffic lanes _____ | Existing number of traffic lanes _____ |
| Existing right of way width _____ | Existing right of way width _____ |
| Proposed number of traffic lanes _____ | Proposed number of traffic lanes _____ |
| Proposed right of way width _____ | Proposed right of way width _____ |

Please provide additional information relating to the following statement.

According to studies conducted by the Institute of Traffic Engineers (ITE) 6/7TH Edition (whichever is applicable), churches generate an average of fifteen (15) vehicle trip end (VTE) per 1,000 square feet of floor area, with an eight (8%) percent peak hour factor. Based on the above formula, the _____ square foot place of worship building would generate _____ vehicle trip ends, with approximately _____ peak hour vehicle trip ends.

Single Family residence, on the other hand, would generate ten (10) VTE's per day per dwelling unit, with a ten (10%) percent peak hour factor. Based on the above referenced formula, the _____ (Single Family Residential) District designation which allows a maximum of _____ units per acres, and the given fact that the project site is approximately _____ acres in land area, _____ daily vehicle trip end, and _____ peak hour vehicle trip end would be generated with residential development of the parcel.

COMMENTS:

Field and plans reviewed. Nothing found that would disrupt traffic pattern/flow.

Signature: [Signature]

NEXT STEPS

Following an approval of this zoning action, one or several of the following may be required:

Land Disturbance Permit *(Required for of new building construction on non-residential properties, or land disturbance/improvement such as storm water detention, paving, digging, or landscaping.)*

Building Permit *(New construction or renovation of a building (interior or exterior) may require full plan submittal or other documentation. zoning, site development, watershed and health department standards will be checked for compliance.)*

Certificate of Occupancy *(Required prior to occupation of a commercial space and for use of property for any business type. The issuance follows the review of submitted plans if required based on the type occupancy.)*

Plat Approval *(Required if any parcel is being subdivided, re-parceled, or combined. Issued “administratively”; no public hearing required.)*

Sketch Plat Approval *(Required for the subdivision of property into three lots or more. Requires a public hearing by the Planning Commission.)*

Overlay Review *(Required review of development and building plans for all new construction or exterior modification of building(s) located within a designated overlay district.)*

Historic Preservation *(Certificate of Appropriateness required for any proposed changes to building exteriors or improvements to land when located within the Druid Hills or the Soapstone Geological Historic Districts. Historic Preservation Committee public hearing may be required.)*

Variance or Special Exception *(Required seeking relief from any development standards of the Zoning Ordinance. A public hearing and action by the Board of Appeals are required for most variances.)*

Minor Modification *(Required if there are any proposed minor changes to zoning conditions that were approved by the Board of Commissioners. The review is administrative if the changes are determined to be minor as described by Zoning Code.)*

Major Modification *(Required submittal of a complete zoning application for a public hearing if there are any proposed changes to zoning conditions approved by the Board of Commissioner on a prior rezoning.)*

Business License *(Required for any business or non-residential enterprise operating in Unincorporated DeKalb County, including in-home occupations).*

Alcohol License *(Required permit to sell alcohol for consumption on-site or packaged for off-site consumption. Signed and sealed distance survey is required. Background checks will be performed.)*

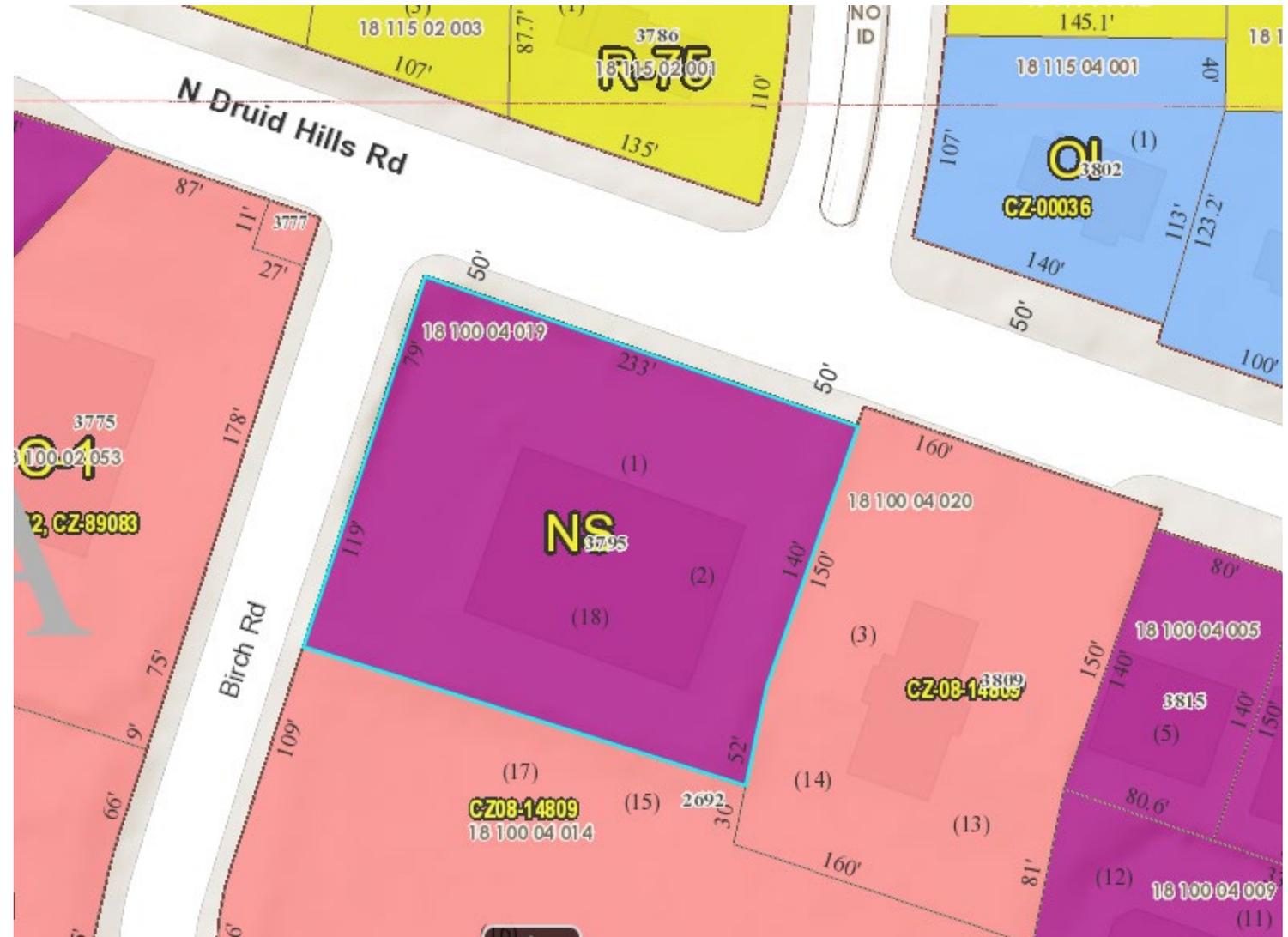
Each of the approvals and permits listed above require submittal of application, fees and supporting documents. Please consult with the appropriate department/division.

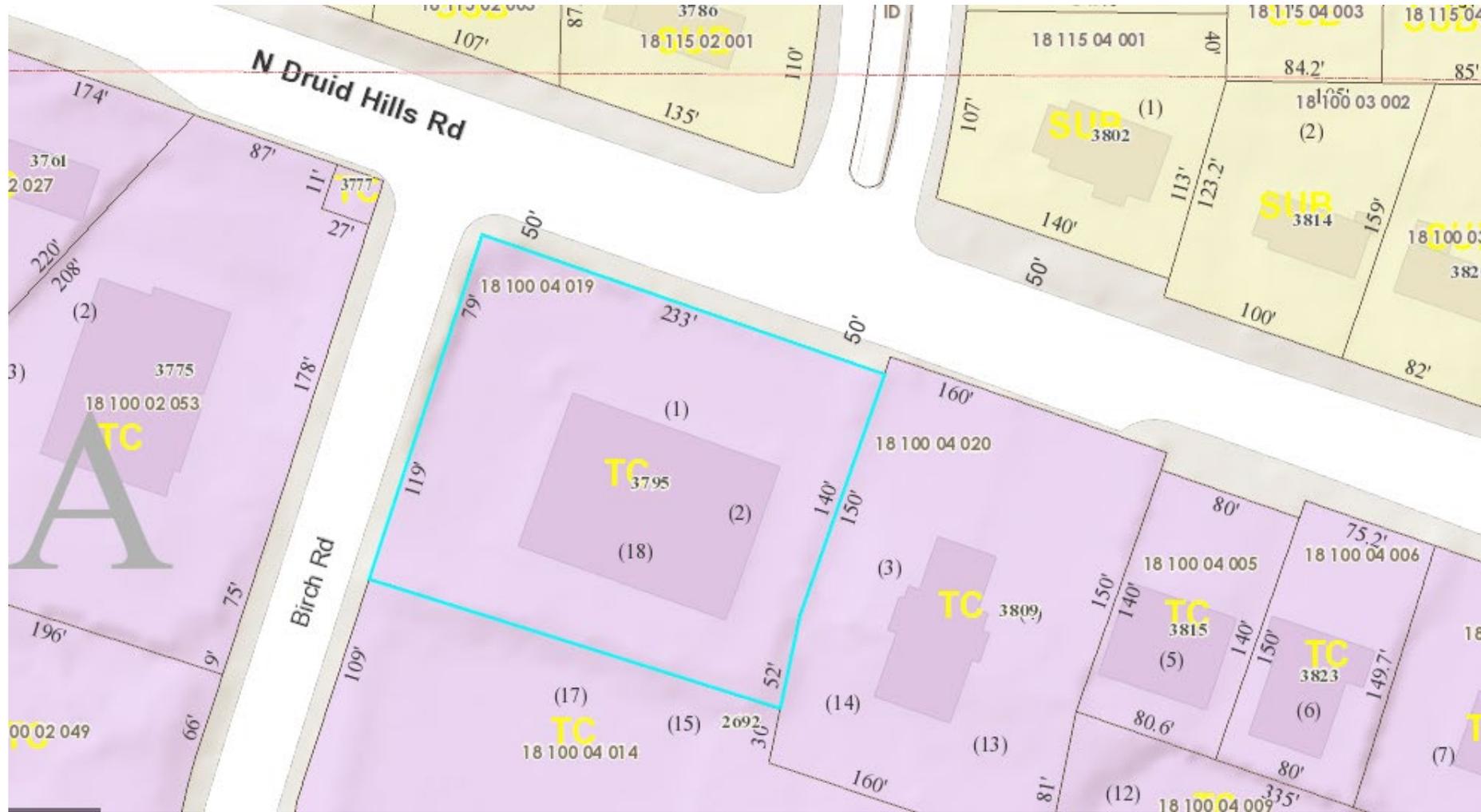
REQUEST:

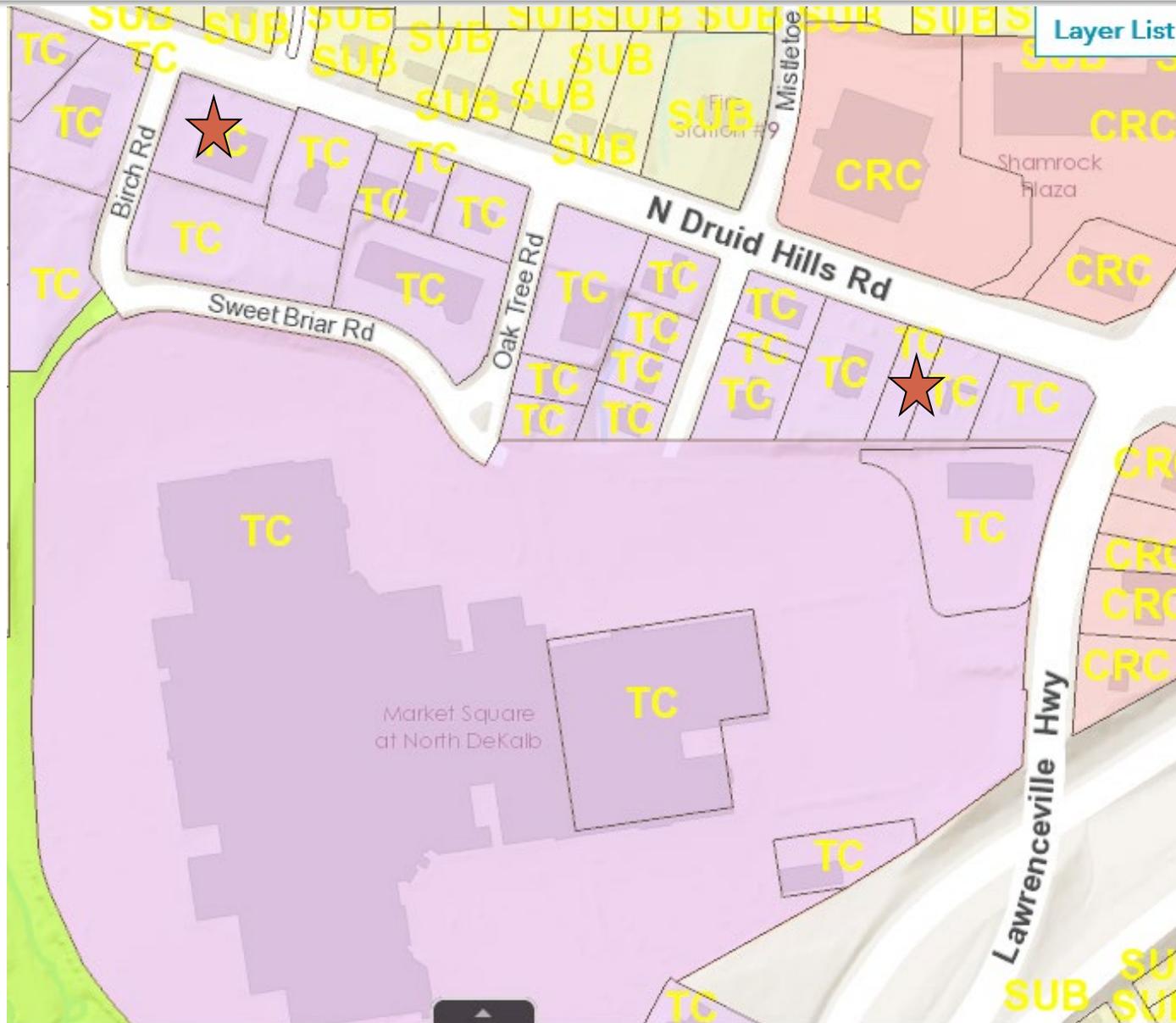
To rezone property from NS (Neighborhood Shopping) to C-1 (Local Commercial) to allow for the development of a drive-through restaurant.

Location: 3795 North Druid Hills Road

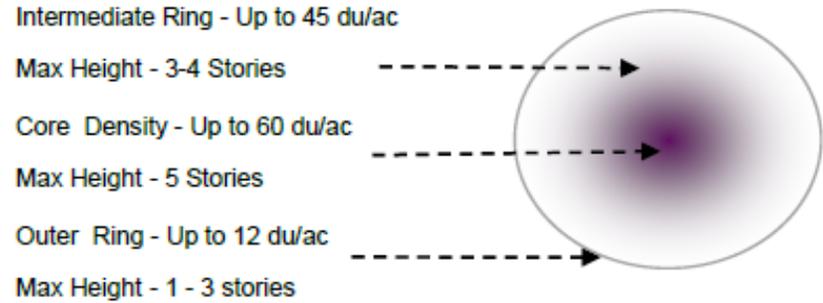
Commission District: 2
Super District: 6





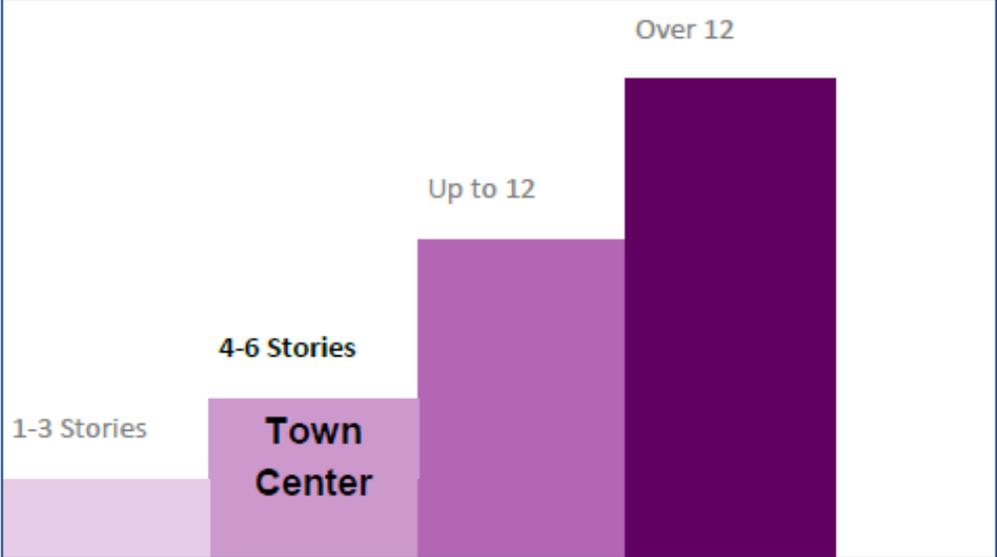


Preferred Intensity



This is a guideline policy to protect single family housing which is supported by the new zoning code

Preferred Building Height for Town Center



November 29, 2021

Ms. Patrece Keeter
DeKalb County Public Works
Transportation Division
1300 Commerce Drive
Decatur, GA 30030

**Intersection Analysis Memo:
North Druid Hills Road at Birch Road Chick-fil-A Relocation Intersection Analysis – Decatur, GA**

Existing Traffic Volumes

The existing Chick-fil-A restaurant located at 3905 N Druid Hills Rd in Decatur, GA, is proposing to relocate to the southeast corner of the Birch Road at N Druid Hills Rd intersection. The proposed site location was previously occupied by a Pier 1 Imports retail store. This memo analyzes the intersection LOS and queuing at North Druid Hills at Birch Road in the existing and proposed building conditions and the potential impacts on the operation of this intersection by the proposed relocation of the Chick-fil-A restaurant.

Traffic count data for this project was originally collected on Tuesday July 13, 2021. Peak hour turning movement counts were collected at the intersections of Birch Road at N Druid Hills Rd and N Druid Hills Rd at both existing Chick-fil-A driveway locations. Additional peak hour turning movement counts were collected again at the Birch Rd intersection on Tuesday August 10th, 2021, after the school year had started. The peak hour volumes at the Birch Rd intersection are provided in Figure 1. The full set of traffic data is provided in Appendix A. Previous collected volumes at the Chick-fil-A driveways have not been adjusted for collection during the summer when school was not in session.

Proposed Traffic Volumes

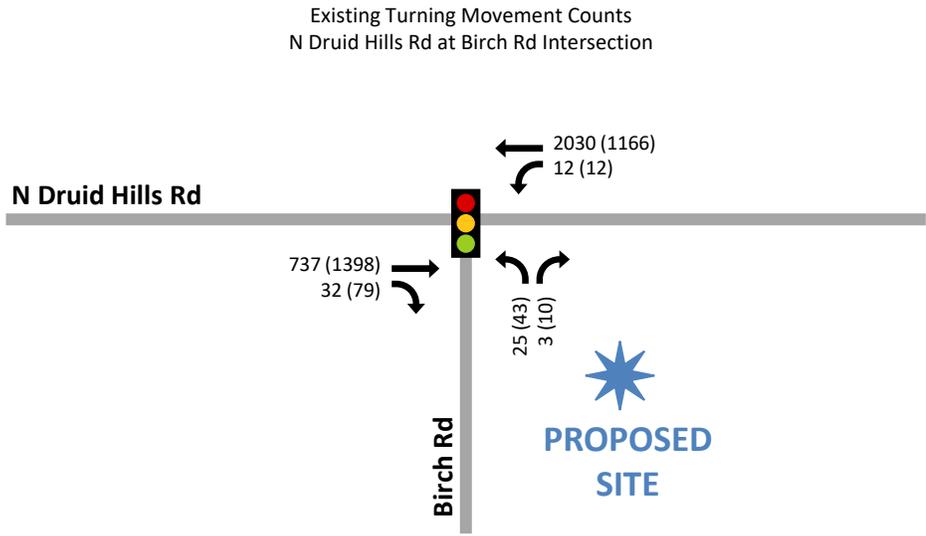
For the proposed traffic volumes, the existing Chick-fil-A trips were distributed to the Birch Rd intersection, the proposed right-in-right-out driveway on North Druid Hills Rd and the full access driveway located on Birch Rd. Chick-fil-A estimates the new site location to generate 10% more trips, so this growth factor is applied to the redistributed existing Chick-fil-A trips. In addition, with the new location proposed at the corner of Birch Rd at North Druid Hills Rd, 10% of the existing left-turning inbound trips have been distributed to arrive internal to the mall site via Sweetbriar Rd to northbound onto Birch Road. The proposed peak hour volumes at the Birch Road intersection are provided in Figures 2 and 3.

Figure 1: Existing Traffic Volumes

(##) → AM (PM) Traffic Volumes



NOT TO SCALE



(##) → MD Traffic Volumes (midday)

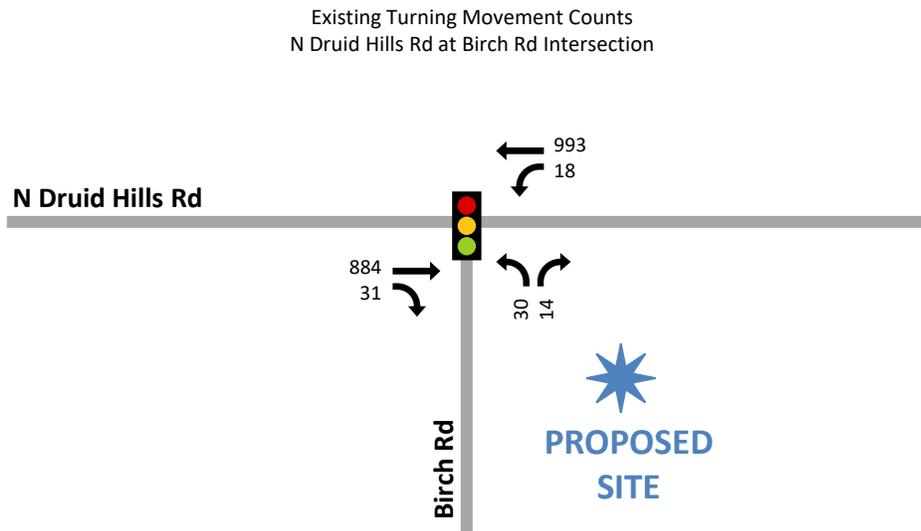


Figure 2: Projected Peak Hour Volumes

(##) → AM (PM) Traffic Volumes

Volumes updated 8/10/2021
 AM peak hour of Chick-fil-A volumes 7:30-8:30am
 PM peak hour of Chick-fil-A volumes 5:00-6:00pm



AM (PM) Peak Hour Turning movement counts – Birch Rd + Proposed Chick-fil-A site on North Druid Hills Rd

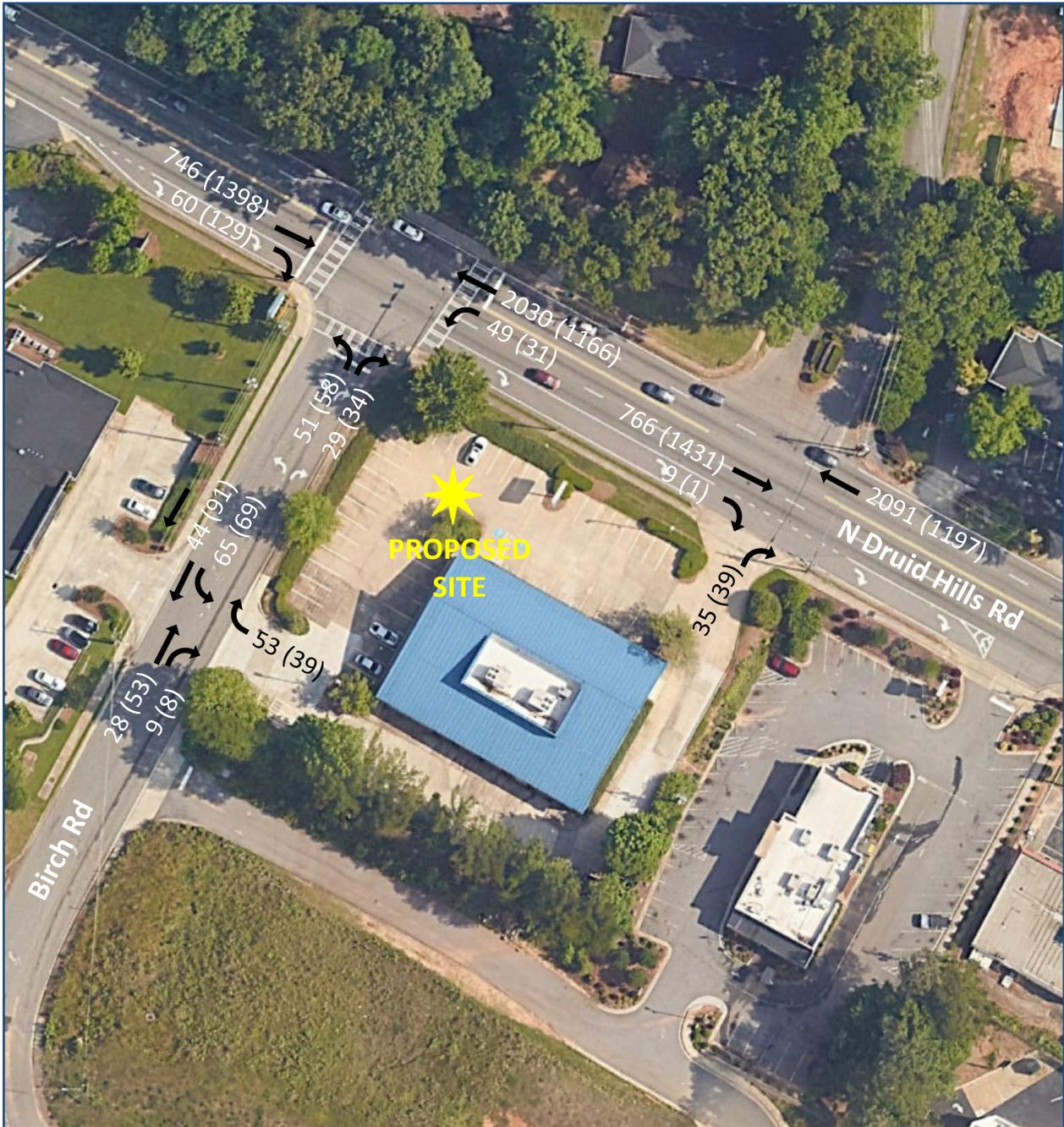


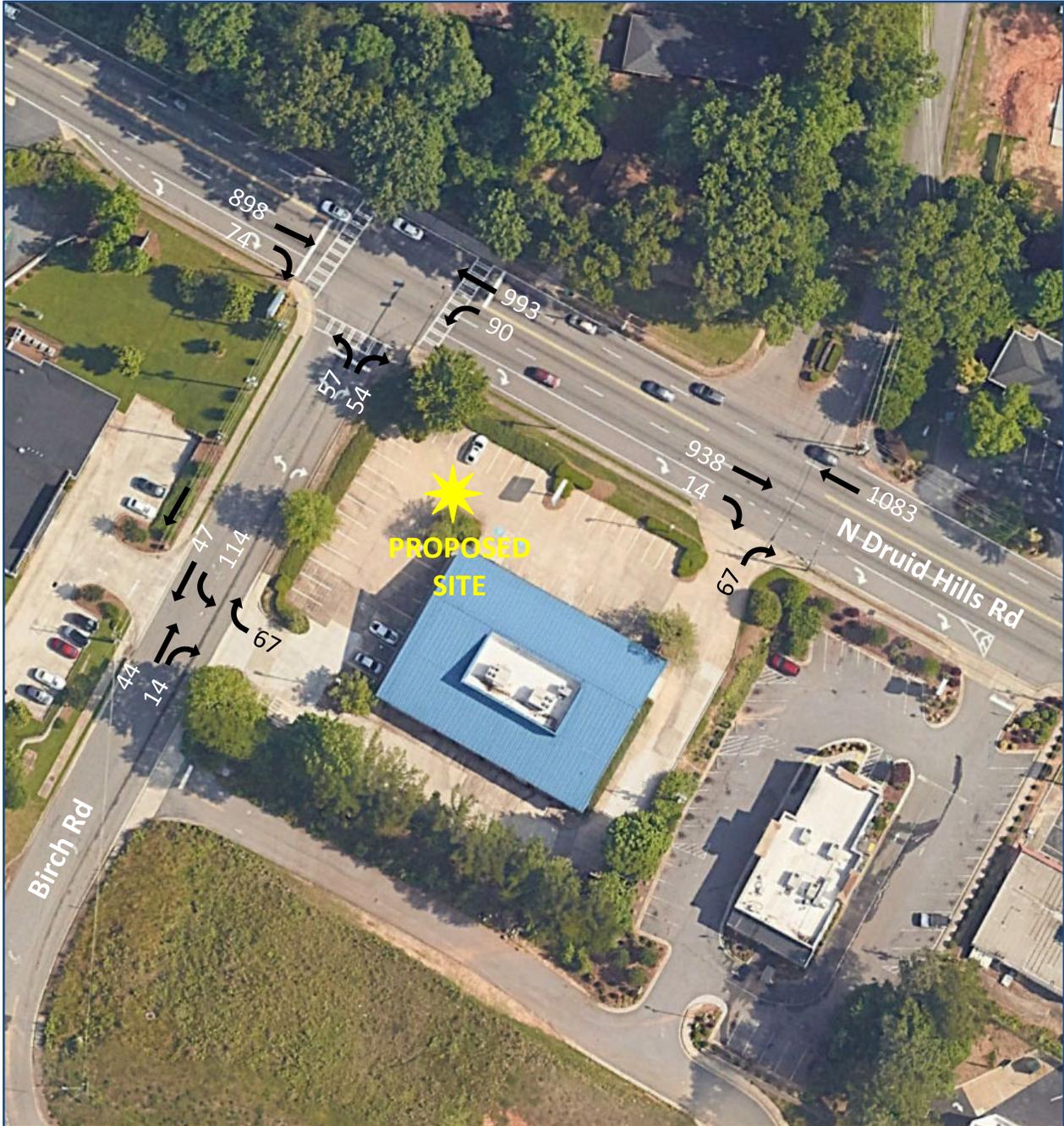
Figure 3: Projected Peak Hour Volumes

(##) → MD Traffic Volumes

Volumes updated 8/10/2021
 MD peak hour of Chick-fil-a volumes 11:45am-12:45pm



AM (PM) Peak Hour Turning movement counts – Birch Rd + Proposed Chick-fil-a site on North Druid Hills Rd



Existing Signal Timings and Field Observation

DeKalb County provided the signal timings for the intersections of Birch Road at North Druid Hills Road and Mistletoe Road. This corridor was observed in the field on Wednesday November 17th, 2021, from 7am to 6pm for all the peak and non-peak hour operations. The observation of this corridor also included the signalized intersections on North Druid Hills Road from US 29/Lawrenceville Hwy to the east and to Willivee Drive to the west of Birch Rd.

During the AM peak period this corridor runs Pattern 10 with a 150 second cycle length. The Midday (MD) period runs Pattern 20, also with a 150 second cycle length. The PM peak period runs Pattern 30 with a 170 second cycle length. On the section of the corridor between Birch Rd and Lawrenceville Hwy, the westbound traffic generally flows better because as vehicles travel westbound from Lawrenceville Hwy the amount of green time to get cars through each intersection on North Druid Hills Rd increases as vehicles go through each intersection towards Birch Rd. Similarly, the green time, or the window of time to get through the intersection on North Druid Hills Rd decreases as vehicles travel eastbound from Birch Rd to Mistletoe Rd to US 29/Lawrenceville Hwy. In the PM peak period this is the primary reason for the extreme backup, delay, and queuing. During the PM peak period the volumes are heavier going eastbound, and the narrowing of the time allowed for throughput reduces at each intersection to the east. The AM peak has a heavier westbound movement and the MD peak volumes are more balanced but increasingly gets heavier eastbound later in the day.

It should be noted that through field observations it was determined that the Birch Rd approach, or the Birch Rd phase of the signal, operates on a constant call. The signal was observed to serve the side street approach, or signal phase, from Birch Rd whether cars were present or not. This signal will serve the full Birch Rd phase split time every cycle during the day. This was also determined to be the case for side street and all left turn phases at the intersections of Mistletoe Rd and US 29/Lawrenceville Hwy. With these phases set on constant call, it was determined that this section of the corridor operates essentially as fixed time signals when setting up our corridor modeling.

During the AM peak the intersection at Birch Rd was observed to operate with no major issues. The AM peak traffic flow is predominately westbound during this time. There were observed to be distinct platoons arriving from Mistletoe Rd that generally always made it through the intersection at Birch Rd. It was observed that cars queuing westbound at this intersection typically arrived from the side streets at Mistletoe Rd or the adjacent neighborhood. There were large gaps in the eastbound traffic that allowed plenty of gaps for cars turning left from North Druid Hills Rd onto Birch Rd to make that turn without much associated delay. This movement was observed for several MARTA buses and large trucks serving the mall area.

The MD peak was observed to operate similarly to the AM peak period. The traffic volumes on North Druid Hills Rd become more balanced directionally, but the operation of the intersection continues to function with very little delay and queuing. The platoons from the east continue to clear the intersection. The eastbound traffic continues to have sizeable gaps in traffic allowing for left turn maneuvers to continue onto Birch Rd without much associated delay.

The PM peak period experiences heaving queuing delay for eastbound traffic that is compounded later in the peak period. The traffic volumes were observed to intensify during the four o'clock hour that coincides with a school release period. During the peak period the queuing originates at US 29/Lawrenceville Hwy intersection and causes delays back at the Mistletoe Rd intersection. This queuing eventually spills back further west impacting the delay at the Birch Rd intersection. The queuing from Birch Rd was observed to average around 2,000-ft+ to the west. It was observed at this intersection when queuing was extreme, drivers would leave the intersection open to allow vehicles turning left from North Druid Hills to make that maneuver. This same type of operation happens at the existing Chick-fil-A driveway location during the PM peak period. This observed queuing was utilized to calibrate the timings for this section of the corridor by oversaturating the demand to match the average queuing in the *SimTraffic* simulation modeling.

Existing Conditions Capacity Analysis

Existing traffic volumes were entered into a *Synchro 10* model to perform capacity analysis of existing conditions for the AM, MD and PM peak periods. The timings were calibrated to the field conditions to match existing conditions. The results of the capacity analysis are shown by lane group movement in Table 1. Average vehicular delays and level-of service, as defined by the Highway Capacity Manual (HCM) 6th Edition are presented, and 95th percentile queues from *SimTraffic 10* are shown. Full *Synchro* output reports are included Appendix B.

Table 1: Existing Conditions Capacity Analysis

| Intersection | Control | Lane Group Movement | AM Peak Hour | | | MD Peak Hour | | | PM Peak Hour | | |
|----------------------------------|----------------|---------------------|--------------|-----|-------------------------------|--------------|-----|-------------------------------|--------------|-----|-------------------------------|
| | | | Delay (s) | LOS | 95 th % Queue (ft) | Delay (s) | LOS | 95 th % Queue (ft) | Delay (s) | LOS | 95 th % Queue (ft) |
| North Druid Hills Rd at Birch Rd | Signal Control | EBT | 7.5 | A | 173 | 8.9 | A | 220 | 36.8 | D | 4539 |
| | | EBR | 5.8 | A | 29 | 6.4 | A | 29 | 5.5 | A | 168 |
| | | WBL | 2.5 | A | 144 | 0.9 | A | 95 | 73.2 | F | 160 |
| | | WBT | 3.1 | A | 167 | 1.1 | A | 70 | 2.6 | A | 166 |
| | | NBL | 49.6 | D | 57 | 48.2 | D | 57 | 61.8 | E | 77 |
| | | NBR | 48.5 | D | 10 | 47.5 | D | 22 | 59.0 | E | 27 |
| | | Intersection | 4.5 | A | - | 5.7 | A | - | 37.1 | D | - |

The intersection of Birch Rd at North Druid Hills Rd is shown to operate at LOS A during the AM and MD peak periods. Under these conditions the NB approach lanes from Birch Rd are shown to operate at LOS D. The northbound approach of the signal is on constant recall.

The PM peak period is shown to operate at LOS D with 37.1 seconds of overall intersection delay. The northbound approaches are shown to operate at LOS E. The existing WBL movement is shown to operate at LOS F. The 95th percentile queuing for the eastbound approach is shown to be 4,539-ft and the average queuing is shown to be at 2,100-ft+. The delay at this intersection is largely due to the extreme peak hour queuing from upstream intersections to the east and less from the side street volume demands.

Build Conditions Capacity Analysis

The proposed redistributed traffic volumes were also entered into a *Synchro 10* model to perform capacity analysis of existing conditions for the AM, MD and PM peak periods. The results of the capacity analysis are shown by lane group movement in Table 2. Average vehicular delays and level-of service, as defined by the Highway Capacity Manual (HCM) 6th Edition are presented, and 95th percentile queues from *SimTraffic 10* are shown. This analysis also include the additional proposed Chick-fil-A driveways located on North Druid Hills Rd and Birch Rd. Full *Synchro* output reports are included Appendix B. The estimated signal timings for the intersection at Birch Rd remain the same as the existing conditions analysis.

Table 2: Build Conditions Capacity Analysis

| Intersection | Control | Lane Group Movement | AM Peak Hour | | | MD Peak Hour | | | PM Peak Hour | | |
|----------------------------------|-----------------------------|---------------------|--------------|-----|-------------------------------|--------------|-----|-------------------------------|--------------|-----|-------------------------------|
| | | | Delay (s) | LOS | 95 th % Queue (ft) | Delay (s) | LOS | 95 th % Queue (ft) | Delay (s) | LOS | 95 th % Queue (ft) |
| North Druid Hills Rd at Birch Rd | Signal Control | EBT | 7.6 | A | 186 | 8.5 | A | 221 | 36.8 | D | 5446 |
| | | EBR | 6.0 | A | 49 | 6.3 | A | 64 | 5.9 | A | 170 |
| | | WBL | 13.6 | B | 183 | 3.5 | A | 176 | 426.2 | F | 207 |
| | | WBT | 10.4 | B | 200 | 1.9 | A | 173 | 5.3 | A | 246 |
| | | NBL | 50.9 | D | 84 | 49.0 | D | 123 | 63.3 | E | 100 |
| | | NBR | 50.6 | D | 37 | 49.3 | D | 57 | 64.0 | E | 96 |
| | Intersection | 11.9 | B | - | 7.6 | A | - | 91.5 | F | - | |
| North Druid Hills Rd at DW1 | Side Street Stop Controlled | EBT | - | - | - | - | - | - | - | - | 228 |
| | | EBR | - | - | - | - | - | - | - | - | - |
| | | WBT | - | - | 134 | - | - | 88 | - | - | 142 |
| | | NBR | 11.6 | B | 38 | 13.3 | B | 47 | 23.9 | C | 96 |
| | | Intersection | 0.1 | - | - | 0.4 | - | - | 0.1 | - | - |
| Birch Rd at DW2 | Side Street Stop Controlled | WB | 8.6 | A | 50 | 8.7 | A | 54 | 8.8 | A | 45 |
| | | NB | - | - | 3 | - | - | - | - | - | 5 |
| | | SB | 7.4 | A | 21 | 7.5 | A | 38 | 7.5 | A | 24 |
| | | Intersection | 4.7 | A | - | 5.7 | A | - | 3.9 | - | - |

The intersection of Birch Rd at North Druid Hills Rd is shown to continue to operate at acceptable levels of service during the AM and MD peak periods with minor increases to the overall intersection delay. Under these conditions the NB approaches from Birch Rd continues to operate at LOS D with minor increases in delay and queuing. The queuing shown during these time periods does not spill back and block the driveway located to the south on Birch Rd. The additional driveways located on North Druid Hills Rd and Birch Rd are shown to operate at acceptable levels of service during the AM and MD peak periods.

The PM peak period is shown to operate at LOS F with 91.5 seconds of overall intersection delay. The northbound approaches are shown to operate at LOS E. The WBL movement continues to operate at LOS F with increased delay. This increased delay for this approach contributes to the overall delay of the intersection degrading to LOS F. The average queuing in this scenario is shown to be at 2,600-ft+.

This intersection was also evaluated by allowing the signal to operate as actuated, removing the constant recall, and with an optimized split time for the Birch Road approach. The impacts of those changes are provided below in Table 3.

Table 3: Build Conditions Capacity Analysis (Optimized)

| Intersection | Control | Lane Group Movement | AM Peak Hour | | | MD Peak Hour | | | PM Peak Hour | | |
|----------------------------------|----------------|---------------------|--------------|-----|-------------------------------|--------------|-----|-------------------------------|--------------|-----|-------------------------------|
| | | | Delay (s) | LOS | 95 th % Queue (ft) | Delay (s) | LOS | 95 th % Queue (ft) | Delay (s) | LOS | 95 th % Queue (ft) |
| North Druid Hills Rd at Birch Rd | Signal Control | EBT | 1.7 | A | 105 | 1.7 | A | 221 | 9.7 | A | 5718 |
| | | EBR | 1.2 | A | 31 | 1.2 | A | 64 | 1.8 | A | 160 |
| | | WBL | 3.9 | A | 132 | 1.2 | A | 176 | 20.5 | C | 210 |
| | | WBT | 3.5 | A | 134 | 1.0 | A | 173 | 2.8 | A | 238 |
| | | NBL | 80.1 | F | 115 | 78.5 | D | 123 | 91.7 | F | 92 |
| | | NBR | 74.0 | E | 20 | 81.8 | D | 57 | 96.1 | F | 155 |
| | | Intersection | 5.1 | A | - | 5.4 | A | - | 12.6 | B | - |

This analysis indicates there is potential opportunity to improve the signal operation with some minor adjustments to the existing timings and functionality of the intersection vehicle detection.

Build Conditions Alternative Analysis

The intersection at Birch and North Druid Hills Rd has also been analyzed with minor changes to the signal timing or intersection configuration with focus during the PM peak operation. The first alternate analysis considers allowing the side street approach (Birch Rd) phase of the signal to be detection actuated instead of being on constant recall. The result of the implemented actuated detection is provided below in Table 4.

Table 4: Build Conditions Alternate Analysis 1

| Intersection | Control | Lane Group Movement | PM Peak Hour | | |
|----------------------------------|----------------|---------------------|--------------|-----|-------------------------------|
| | | | Delay (s) | LOS | 95 th % Queue (ft) |
| North Druid Hills Rd at Birch Rd | Signal Control | EBT | 9.3 | A | 5601 |
| | | EBR | 1.8 | A | 164 |
| | | WBL | 20.8 | C | 212 |
| | | WBT | 2.8 | A | 228 |
| | | NBL | 91.1 | F | 114 |
| | | NBR | 95.3 | F | 121 |
| | | Intersection | 12.7 | B | - |

These results indicate the intersection can potentially operate at LOS B in the PM peak period. The actuated detection does increase delay for the northbound approaches to degrade to LOS F. This adjustment also improves the WBL approach delay which most benefits the reduction of the overall delay at the intersection.

The intersection at Birch and North Druid Hills Rd has also been analyzed as a half-cycle operation with just a minimum recall placed on the side street approach. This shortened the cycle time at this intersection to 85 seconds, but the intersection remains in coordination with the other intersections on the corridor. The result of the implemented timings changes is provided below in Table 5.

Table 5: Build Conditions Alternate Analysis 2

| Intersection | Control | Lane Group Movement | PM Peak Hour | | |
|----------------------------------|----------------|---------------------|--------------|-----|-----------------------------|
| | | | Delay (s) | LOS | 95 th Queue (ft) |
| North Druid Hills Rd at Birch Rd | Signal Control | EBT | 17.6 | B | 5527 |
| | | EBR | 2.4 | A | 165 |
| | | WBL | 27.4 | C | 203 |
| | | WBT | 3.6 | A | 238 |
| | | NBL | 44.3 | D | 65 |
| | | NBR | 46.1 | D | 65 |
| | | Intersection | 17.0 | B | - |

These results indicate the intersection can potentially operate at LOS B in the PM peak period with a reduced half cycle. The minor street approach in this scenario was placed on minimum recall. This adjustment also improves the WBL approach delay which most benefits the reduction of the overall delay at the intersection.

The intersection at Birch and North Druid Hills Rd has also been analyzed to consider a future potential left turn lane with left turn signal phasing operation. The side street approach has been placed in a maximum constant recall, as in the existing conditions, but the split time has been reduced. A left turn phase and timing has also been included with actuated detection. The result of the implemented timings changes is provided below in Table 6.

Table 6: Build Conditions Alternate Analysis 3

| Intersection | Control | Lane Group Movement | PM Peak Hour | | |
|----------------------------------|----------------|---------------------|--------------|-----|-----------------------------|
| | | | Delay (s) | LOS | 95 th Queue (ft) |
| North Druid Hills Rd at Birch Rd | Signal Control | EBT | 34.3 | C | 5482 |
| | | EBR | 5.6 | A | 168 |
| | | WBL | 55.4 | E | 73 |
| | | WBT | 1.0 | A | 61 |
| | | NBL | 76.7 | E | 104 |
| | | NBR | 78.4 | E | 101 |
| | | Intersection | 23.3 | C | - |

These results indicate the intersection can potentially operate at LOS C in the PM peak period with a reduced side street approach phase time and the inclusion of a westbound left turn lane and signal phase. The minor street approach in this scenario was placed on maximum recall with a reduced split time. This adjustment also improves the WBT operation and approach. The WBL queuing is also reduced.

Conclusions and Recommendations

The intersection of Birch Rd at North Druid Hills Rd operates at acceptable levels of service, with minor delay and queuing during the AM and MD peak periods in the existing conditions. This intersection continues to operate at acceptable levels of service, with minor delay and queuing, when the volumes generated by Chick-fil-A are distributed to this intersection.

During the PM peak period the intersection of Birch Rd at North Druid Hills Rd experiences delay and queuing that can be attributed to delay and queuing originating from intersections located to the east. The Birch Rd intersection is shown to operate at LOS D during the PM peak period with average queuing observed to be 2,000-ft+ to the west. When the Chick-fil-A traffic is distributed to the intersection in the PM peak period, and simulated with the existing timing configuration, the intersection delay is shown to increase, degrading the overall intersection level of service. However, there are potentially a few minor timing adjustments then could be implemented to help reduce delay and improve the overall intersection level of service.

Because of the extreme queuing and backup occurring on the corridor during the PM peak period, the driveways for the Chick-fil-A at the existing location are experiencing the same type of delays shown when those volumes are distributed to the Birch Rd intersection. By relocating the restaurant, the Birch Rd intersection can potentially allow for improved traffic operations by providing a signal operation for the outbound vehicles turning left from Chick-fil-A. In addition, having the option for customers to arrive from south of the site via Birch Rd may potentially reduce traffic demands of customers arriving via North Druid Hills Rd.

The simulation modeling indicates that the intersection operation can potentially be improved with some minor timing adjustments, even with the addition of traffic volumes generated by the Chick-fil-A. These timing and signal adjustments could be implemented relatively quickly if necessary. For the long-term operation of this intersection, it is recommended for westbound left turn lane and left turn signal phasing be added to this intersection.

Please contact me or Jack Johnson at 770-368-1399 if you have any questions or need additional information.

Sincerely,



FORESITE GROUP, LLC

Stevie Berryman
Project Manager

Appendix A: Traffic Counts

National Data & Surveying Services Intersection Turning Movement Count

Location: Birch Rd & N Druid Hills Rd
City: Decatur
Control: Signalized

Project ID: 21-180213-001
Date: 8/10/2021

Data - Total

| NS/EW Streets: | Birch Rd | | | | Birch Rd | | | | N Druid Hills Rd | | | | N Druid Hills Rd | | | | |
|-------------------------|---------------------|---------|---------|---------|------------|---------|---------|---------|------------------|---------|---------|---------|------------------|---------|---------|---------|-------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | 1 NL | 0 NT | 1 NR | 0 NU | 0 SL | 0 ST | 0 SR | 0 SU | 0 EL | 2 ET | 1 ER | 0 EU | 0 WL | 2 WT | 0 WR | 0 WU | |
| 6:00 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 2 | 0 | 0 | 211 | 0 | 0 | 272 |
| 6:15 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 98 | 3 | 0 | 4 | 287 | 0 | 0 | 393 |
| 6:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 99 | 0 | 0 | 0 | 362 | 0 | 0 | 461 |
| 6:45 AM | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 107 | 4 | 0 | 3 | 419 | 0 | 0 | 536 |
| 7:00 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 127 | 4 | 0 | 0 | 405 | 0 | 0 | 537 |
| 7:15 AM | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 153 | 2 | 0 | 2 | 443 | 0 | 0 | 603 |
| 7:30 AM | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 192 | 9 | 0 | 2 | 549 | 0 | 0 | 756 |
| 7:45 AM | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 181 | 9 | 0 | 5 | 535 | 0 | 0 | 737 |
| 8:00 AM | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 167 | 7 | 0 | 3 | 475 | 0 | 0 | 656 |
| 8:15 AM | 12 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 197 | 7 | 0 | 2 | 471 | 0 | 0 | 690 |
| 8:30 AM | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 191 | 9 | 0 | 1 | 525 | 0 | 0 | 732 |
| 8:45 AM | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 159 | 6 | 0 | 3 | 480 | 0 | 0 | 651 |
| TOTAL VOLUMES : | 43 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1729 | 62 | 0 | 25 | 5162 | 0 | 0 | 7024 |
| APPROACH %'s : | 93.48% | 0.00% | 6.52% | 0.00% | | | | | 0.00% | 96.54% | 3.46% | 0.00% | 0.48% | 99.52% | 0.00% | 0.00% | |
| PEAK HR : | 07:30 AM - 08:30 AM | | | | | | | | | | | | | | | | |
| PEAK HR VOL : | 25 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 737 | 32 | 0 | 12 | 2030 | 0 | 0 | 2839 |
| PEAK HR FACTOR : | 0.521 | 0.000 | 0.375 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.935 | 0.889 | 0.000 | 0.600 | 0.924 | 0.000 | 0.000 | 0.939 |
| | 0.538 | | | | | | | | | | | | | | | | |
| | 0.942 | | | | | | | | | | | | | | | | |
| | 0.926 | | | | | | | | | | | | | | | | |
| NOON | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| 1 NL | 0 NT | 1 NR | 0 NU | 0 SL | 0 ST | 0 SR | 0 SU | 0 EL | 2 ET | 1 ER | 0 EU | 0 WL | 2 WT | 0 WR | 0 WU | | |
| 11:00 AM | 8 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 192 | 7 | 0 | 5 | 263 | 0 | 0 | 477 |
| 11:15 AM | 7 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 231 | 10 | 0 | 1 | 236 | 0 | 0 | 487 |
| 11:30 AM | 6 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 195 | 7 | 0 | 4 | 245 | 0 | 0 | 459 |
| 11:45 AM | 12 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 215 | 7 | 0 | 6 | 270 | 0 | 0 | 512 |
| 12:00 PM | 7 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 215 | 11 | 0 | 2 | 222 | 0 | 0 | 462 |
| 12:15 PM | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 211 | 8 | 0 | 4 | 240 | 0 | 0 | 473 |
| 12:30 PM | 6 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 243 | 5 | 1 | 6 | 261 | 0 | 1 | 525 |
| 12:45 PM | 8 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 225 | 11 | 0 | 2 | 255 | 0 | 0 | 504 |
| 1:00 PM | 6 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 252 | 19 | 0 | 3 | 226 | 0 | 0 | 509 |
| 1:15 PM | 5 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 251 | 9 | 0 | 3 | 232 | 0 | 0 | 502 |
| 1:30 PM | 8 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 247 | 12 | 0 | 4 | 256 | 0 | 0 | 528 |
| 1:45 PM | 6 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 239 | 14 | 0 | 4 | 265 | 0 | 0 | 536 |
| TOTAL VOLUMES : | 84 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 2716 | 120 | 1 | 44 | 2971 | 0 | 1 | 5974 |
| APPROACH %'s : | 69.42% | 0.00% | 30.58% | 0.00% | | | | | 0.00% | 95.73% | 4.23% | 0.04% | 1.46% | 98.51% | 0.00% | 0.03% | |
| PEAK HR : | 01:00 PM - 02:00 PM | | | | | | | | | | | | | | | | |
| PEAK HR VOL : | 25 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 989 | 54 | 0 | 14 | 979 | 0 | 0 | 2075 |
| PEAK HR FACTOR : | 0.781 | 0.000 | 0.438 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.981 | 0.711 | 0.000 | 0.875 | 0.924 | 0.000 | 0.000 | 0.968 |
| | 0.696 | | | | | | | | | | | | | | | | |
| | 0.962 | | | | | | | | | | | | | | | | |
| | 0.923 | | | | | | | | | | | | | | | | |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| 1 NL | 0 NT | 1 NR | 0 NU | 0 SL | 0 ST | 0 SR | 0 SU | 0 EL | 2 ET | 1 ER | 0 EU | 0 WL | 2 WT | 0 WR | 0 WU | | |
| 3:00 PM | 7 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 342 | 17 | 0 | 1 | 238 | 0 | 0 | 608 |
| 3:15 PM | 8 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 379 | 9 | 0 | 4 | 249 | 0 | 0 | 650 |
| 3:30 PM | 11 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 403 | 20 | 0 | 2 | 191 | 0 | 0 | 633 |
| 3:45 PM | 11 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 354 | 16 | 0 | 3 | 223 | 0 | 0 | 614 |
| 4:00 PM | 15 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 343 | 17 | 0 | 6 | 227 | 0 | 0 | 611 |
| 4:15 PM | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 330 | 23 | 0 | 4 | 302 | 0 | 0 | 667 |
| 4:30 PM | 11 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 331 | 23 | 0 | 3 | 234 | 0 | 1 | 607 |
| 4:45 PM | 15 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 352 | 24 | 0 | 1 | 239 | 0 | 0 | 637 |
| 5:00 PM | 14 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 317 | 29 | 0 | 6 | 254 | 0 | 0 | 623 |
| 5:15 PM | 8 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 350 | 16 | 0 | 1 | 263 | 0 | 0 | 642 |
| 5:30 PM | 9 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 381 | 17 | 0 | 1 | 322 | 0 | 0 | 731 |
| 5:45 PM | 12 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 350 | 17 | 0 | 4 | 327 | 0 | 0 | 712 |
| TOTAL VOLUMES : | 128 | 0 | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 4232 | 228 | 0 | 36 | 3069 | 0 | 1 | 7735 |
| APPROACH %'s : | 75.74% | 0.00% | 24.26% | 0.00% | | | | | 0.00% | 94.89% | 5.11% | 0.00% | 1.16% | 98.81% | 0.00% | 0.03% | |
| PEAK HR : | 05:00 PM - 06:00 PM | | | | | | | | | | | | | | | | |
| PEAK HR VOL : | 43 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 1398 | 79 | 0 | 12 | 1166 | 0 | 0 | 2708 |
| PEAK HR FACTOR : | 0.768 | 0.000 | 0.625 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.917 | 0.681 | 0.000 | 0.500 | 0.891 | 0.000 | 0.000 | 0.926 |
| | 0.779 | | | | | | | | | | | | | | | | |
| | 0.928 | | | | | | | | | | | | | | | | |
| | 0.890 | | | | | | | | | | | | | | | | |

National Data & Surveying Services Intersection Turning Movement Count

Location: Chick-fil-A W Dwy & N Druid Hills Rd
City: Decatur
Control: No Control

Project ID: 21-180189-002
Date: 7/13/2021

Data - Totals

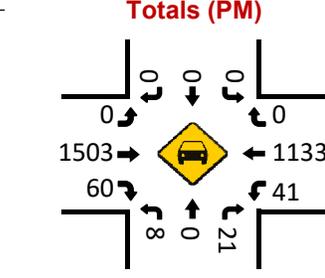
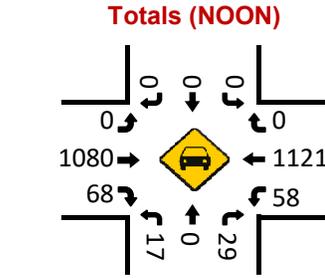
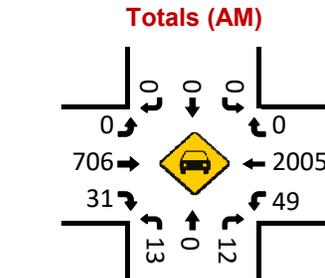
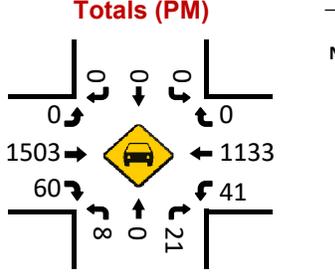
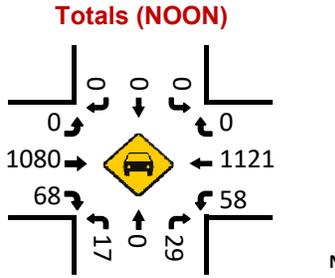
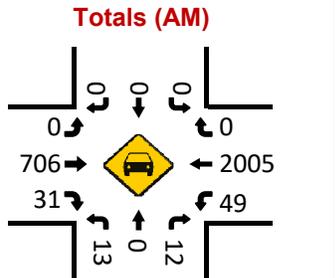
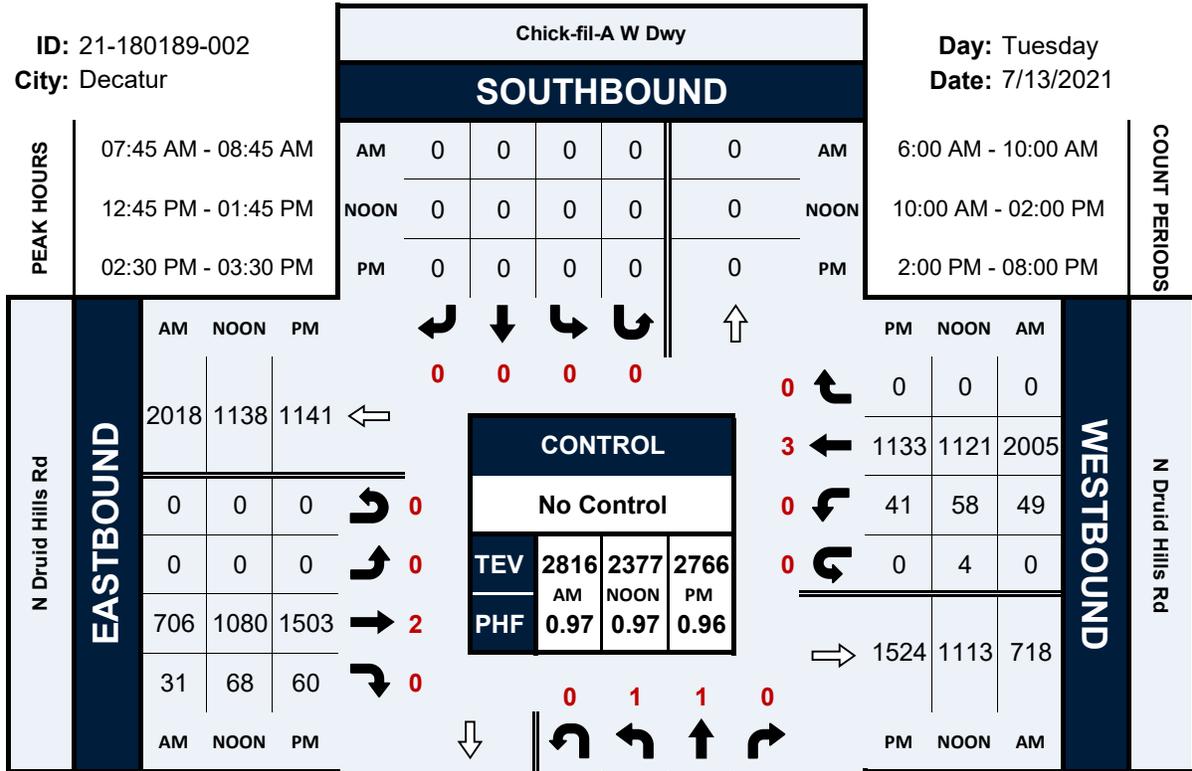
| NS/EW Streets: | Chick-fil-A W Dwy | | | | Chick-fil-A W Dwy | | | | N Druid Hills Rd | | | | N Druid Hills Rd | | | | |
|-------------------------|---------------------|---------|---------|---------|-------------------|---------|---------|---------|------------------|---------|---------|---------|------------------|---------|---------|---------|--------------|
| AM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| | 1 NL | 1 NT | 0 NR | 0 NU | 0 SL | 0 ST | 0 SR | 0 SU | 0 EL | 2 ET | 0 ER | 0 EU | 0 WL | 3 WT | 0 WR | 0 WU | |
| 6:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 0 | 0 | 9 | 187 | 0 | 0 | 243 |
| 6:15 AM | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 76 | 7 | 0 | 6 | 274 | 0 | 0 | 365 |
| 6:30 AM | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 83 | 3 | 0 | 15 | 315 | 0 | 0 | 419 |
| 6:45 AM | 4 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 112 | 5 | 0 | 11 | 339 | 0 | 0 | 474 |
| 7:00 AM | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 107 | 4 | 0 | 19 | 363 | 0 | 0 | 497 |
| 7:15 AM | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 125 | 6 | 0 | 10 | 404 | 0 | 0 | 548 |
| 7:30 AM | 4 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 167 | 15 | 0 | 16 | 470 | 0 | 0 | 674 |
| 7:45 AM | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 171 | 10 | 0 | 6 | 526 | 0 | 0 | 718 |
| 8:00 AM | 5 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 177 | 10 | 0 | 16 | 517 | 0 | 0 | 729 |
| 8:15 AM | 4 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 177 | 1 | 0 | 10 | 497 | 0 | 0 | 692 |
| 8:30 AM | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 181 | 10 | 0 | 17 | 465 | 0 | 0 | 677 |
| 8:45 AM | 3 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 183 | 12 | 0 | 17 | 477 | 0 | 0 | 697 |
| 9:00 AM | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 191 | 10 | 0 | 13 | 363 | 0 | 0 | 584 |
| 9:15 AM | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 181 | 10 | 0 | 16 | 386 | 0 | 0 | 600 |
| 9:30 AM | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 168 | 17 | 0 | 20 | 365 | 0 | 0 | 580 |
| 9:45 AM | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 208 | 13 | 0 | 10 | 351 | 0 | 0 | 588 |
| TOTAL VOLUMES : | 45 | 0 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 2354 | 133 | 0 | 211 | 6299 | 0 | 0 | 9085 |
| APPROACH %'s : | 51.14% | 0.00% | 48.86% | 0.00% | | | | | 0.00% | 94.65% | 5.35% | 0.00% | 3.24% | 96.76% | 0.00% | 0.00% | |
| PEAK HR : | 07:45 AM - 08:45 AM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 13 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 706 | 31 | 0 | 49 | 2005 | 0 | 0 | 2816 |
| PEAK HR FACTOR : | 0.650 | 0.000 | 0.750 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.975 | 0.775 | 0.000 | 0.721 | 0.953 | 0.000 | 0.000 | 0.966 |
| | | | 0.694 | | | | | | | 0.965 | | | | 0.963 | | | |
| NOON | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| 10:00 AM | 6 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 172 | 7 | 0 | 16 | 259 | 0 | 0 | |
| 10:15 AM | 7 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 187 | 17 | 0 | 10 | 259 | 0 | 0 | 483 |
| 10:30 AM | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 226 | 9 | 0 | 13 | 277 | 0 | 0 | 533 |
| 10:45 AM | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 196 | 10 | 0 | 12 | 258 | 0 | 0 | 483 |
| 11:00 AM | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 10 | 0 | 18 | 230 | 0 | 0 | 482 |
| 11:15 AM | 5 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 228 | 14 | 0 | 13 | 259 | 0 | 1 | 526 |
| 11:30 AM | 3 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 254 | 15 | 0 | 15 | 281 | 0 | 0 | 575 |
| 11:45 AM | 1 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 232 | 14 | 0 | 24 | 247 | 0 | 0 | 527 |
| 12:00 PM | 3 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 229 | 10 | 0 | 16 | 250 | 0 | 1 | 516 |
| 12:15 PM | 2 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 258 | 16 | 0 | 12 | 278 | 0 | 0 | 571 |
| 12:30 PM | 3 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 259 | 16 | 0 | 22 | 237 | 0 | 0 | 543 |
| 12:45 PM | 4 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 291 | 17 | 0 | 11 | 268 | 0 | 3 | 601 |
| 1:00 PM | 3 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 266 | 18 | 0 | 18 | 269 | 0 | 1 | 582 |
| 1:15 PM | 9 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 273 | 18 | 0 | 10 | 294 | 0 | 0 | 614 |
| 1:30 PM | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 250 | 15 | 0 | 19 | 290 | 0 | 0 | 580 |
| 1:45 PM | 3 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 274 | 20 | 0 | 8 | 280 | 0 | 0 | 593 |
| TOTAL VOLUMES : | 59 | 0 | 97 | 0 | 0 | 0 | 0 | 0 | 0 | 3815 | 226 | 0 | 237 | 4236 | 0 | 6 | 8676 |
| APPROACH %'s : | 37.82% | 0.00% | 62.18% | 0.00% | | | | | 0.00% | 94.41% | 5.59% | 0.00% | 5.29% | 94.57% | 0.00% | 0.13% | |
| PEAK HR : | 12:45 PM - 01:45 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 17 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 1080 | 68 | 0 | 58 | 1121 | 0 | 4 | 2377 |
| PEAK HR FACTOR : | 0.472 | 0.000 | 0.725 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.928 | 0.944 | 0.000 | 0.763 | 0.953 | 0.000 | 0.333 | 0.968 |
| | | | 0.605 | | | | | | | 0.932 | | | | 0.957 | | | |
| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | TOTAL |
| 2:00 PM | 3 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 318 | 8 | 0 | 18 | 225 | 0 | 0 | |
| 2:15 PM | 1 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 328 | 15 | 0 | 10 | 272 | 0 | 0 | 636 |
| 2:30 PM | 2 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 392 | 15 | 0 | 14 | 289 | 0 | 0 | 720 |
| 2:45 PM | 1 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 355 | 14 | 0 | 9 | 273 | 0 | 0 | 660 |
| 3:00 PM | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 367 | 16 | 0 | 8 | 271 | 0 | 0 | 665 |
| 3:15 PM | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 389 | 15 | 0 | 10 | 300 | 0 | 0 | 721 |
| 3:30 PM | 2 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 356 | 8 | 0 | 12 | 252 | 0 | 1 | 636 |
| 3:45 PM | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 378 | 13 | 0 | 7 | 247 | 0 | 0 | 647 |
| 4:00 PM | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 391 | 10 | 0 | 4 | 284 | 0 | 0 | 694 |
| 4:15 PM | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 373 | 9 | 1 | 9 | 287 | 0 | 0 | 685 |
| 4:30 PM | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 366 | 12 | 1 | 9 | 249 | 0 | 0 | 641 |
| 4:45 PM | 4 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 381 | 9 | 0 | 4 | 258 | 0 | 0 | 659 |
| 5:00 PM | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 394 | 9 | 0 | 7 | 277 | 0 | 0 | 693 |
| 5:15 PM | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 352 | 16 | 0 | 8 | 270 | 0 | 0 | 651 |
| 5:30 PM | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 374 | 8 | 0 | 5 | 257 | 0 | 0 | 650 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 394 | 13 | 0 | 4 | 256 | 0 | 0 | 667 |
| 6:00 PM | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 369 | 12 | 0 | 4 | 238 | 0 | 0 | 626 |
| 6:15 PM | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 353 | 10 | 0 | 7 | 234 | 0 | 0 | 609 |
| 6:30 PM | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 378 | 14 | 0 | 6 | 241 | 0 | 0 | 647 |
| 6:45 PM | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 322 | 11 | 0 | 14 | 229 | 0 | 0 | 581 |
| 7:00 PM | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 290 | 19 | 0 | 14 | 179 | 0 | 0 | 506 |
| 7:15 PM | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 286 | 10 | 0 | 6 | 208 | 0 | 0 | 515 |
| 7:30 PM | 3 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 276 | 13 | 0 | 13 | 193 | 0 | 1 | 505 |
| 7:45 PM | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 257 | 12 | 0 | 11 | 169 | 0 | 0 | 451 |
| TOTAL VOLUMES : | 43 | 0 | 94 | 0 | 0 | 0 | 0 | 0 | 0 | 8439 | 291 | 2 | 213 | 5958 | 0 | 2 | 15042 |
| APPROACH %'s : | 31.39% | 0.00% | 68.61% | 0.00% | | | | | 0.00% | 96.64% | 3.33% | 0.02% | 3.45% | 96.52% | 0.00% | 0.03% | |
| PEAK HR : | 02:30 PM - 03:30 PM | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 8 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 1503 | 60 | 0 | 41 | 1133 | 0 | 0 | 2766 |
| PEAK HR FACTOR : | 0.667 | 0.000 | 0.656 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.959 | 0.938 | 0.000 | 0.732 | 0.944 | 0.000 | 0.000 | 0.959 |
| | | | 0.725 | | | | | | | 0.960 | | | | 0.947 | | | |

Chick-fil-A W Dwy & N Druid Hills Rd

Peak Hour Turning Movement Count

ID: 21-180189-002
City: Decatur

Day: Tuesday
Date: 7/13/2021



National Data & Surveying Services Intersection Turning Movement Count

Location: Chick-fil-A E Dwy & N Druid Hills Rd
 City: Decatur
 Control: 1-Way Stop(SB)

Project ID: 21-180189-003
 Date: 7/13/2021

Data - Totals

| NS/EW Streets: | Chick-fil-A E Dwy | | | | Chick-fil-A E Dwy | | | | N Druid Hills Rd | | | | N Druid Hills Rd | | | | TOTAL | | | |
|-------------------------|---------------------|-------|-------|--------|-------------------|--------|-------|--------|------------------|-------|--------|-------|------------------|-------|--------|-------|-------|---|-------|--------------|
| | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | | | | |
| AM | 0.5 | 0 | 0.5 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | | | | |
| 6:00 AM | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 0 | 0 | 0 | 199 | 1 | 0 | | | 254 | |
| 6:15 AM | 2 | 1 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 76 | 0 | 0 | 0 | 274 | 0 | 0 | | | 362 | |
| 6:30 AM | 2 | 0 | 8 | 0 | 0 | 0 | 2 | 0 | 0 | 85 | 0 | 0 | 0 | 334 | 3 | 0 | | | 434 | |
| 6:45 AM | 2 | 0 | 9 | 0 | 1 | 0 | 1 | 0 | 1 | 111 | 0 | 0 | 0 | 339 | 6 | 0 | | | 470 | |
| 7:00 AM | 4 | 0 | 9 | 0 | 0 | 0 | 2 | 0 | 2 | 110 | 0 | 0 | 0 | 376 | 8 | 1 | | | 512 | |
| 7:15 AM | 4 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 126 | 0 | 0 | 0 | 420 | 6 | 0 | | | 569 | |
| 7:30 AM | 3 | 0 | 12 | 0 | 0 | 0 | 3 | 0 | 2 | 163 | 0 | 0 | 0 | 470 | 8 | 1 | | | 662 | |
| 7:45 AM | 1 | 0 | 14 | 0 | 2 | 0 | 5 | 0 | 1 | 176 | 0 | 0 | 0 | 526 | 9 | 0 | | | 734 | |
| 8:00 AM | 3 | 1 | 10 | 0 | 1 | 0 | 3 | 0 | 0 | 181 | 0 | 0 | 0 | 529 | 12 | 0 | | | 740 | |
| 8:15 AM | 1 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 1 | 179 | 0 | 0 | 0 | 504 | 10 | 1 | | | 705 | |
| 8:30 AM | 1 | 0 | 16 | 0 | 0 | 0 | 1 | 0 | 1 | 181 | 0 | 0 | 0 | 480 | 10 | 0 | | | 690 | |
| 8:45 AM | 2 | 0 | 13 | 0 | 0 | 0 | 2 | 0 | 1 | 188 | 0 | 0 | 0 | 491 | 15 | 0 | | | 712 | |
| 9:00 AM | 2 | 0 | 18 | 0 | 2 | 0 | 6 | 0 | 0 | 196 | 0 | 0 | 0 | 367 | 16 | 0 | | | 607 | |
| 9:15 AM | 2 | 1 | 15 | 0 | 2 | 0 | 4 | 0 | 0 | 185 | 0 | 0 | 0 | 396 | 16 | 0 | | | 621 | |
| 9:30 AM | 3 | 0 | 10 | 0 | 2 | 0 | 5 | 1 | 2 | 170 | 0 | 0 | 0 | 381 | 8 | 0 | | | 582 | |
| 9:45 AM | 1 | 0 | 19 | 0 | 2 | 0 | 3 | 0 | 4 | 208 | 0 | 0 | 0 | 353 | 21 | 0 | | | 611 | |
| TOTAL VOLUMES : | 34 | 3 | 189 | 0 | 12 | 0 | 37 | 1 | 15 | 2383 | 0 | 0 | 0 | 6439 | 149 | 3 | | | 9265 | |
| APPROACH %'s : | 15.04% | | 1.33% | 83.63% | 0.00% | 24.00% | 0.00% | 74.00% | 2.00% | 0.63% | 99.37% | 0.00% | 0.00% | 0.00% | 97.69% | 2.26% | | | 0.05% | |
| PEAK HR : | 07:45 AM - 08:45 AM | | | | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 6 | 1 | 49 | 0 | 3 | 0 | 9 | 0 | 3 | 717 | 0 | 0 | 0 | 2039 | 41 | 1 | | | 2869 | |
| PEAK HR FACTOR : | 0.500 | 0.250 | 0.766 | 0.000 | 0.375 | 0.000 | 0.450 | 0.000 | 0.750 | 0.990 | 0.000 | 0.000 | 0.000 | 0.964 | 0.854 | 0.250 | | | 0.969 | |
| | | | 0.824 | | | | 0.429 | | | 0.989 | | | | 0.962 | | | | | | |

| NS/EW Streets: | Chick-fil-A E Dwy | | | | Chick-fil-A E Dwy | | | | N Druid Hills Rd | | | | N Druid Hills Rd | | | | TOTAL | | | |
|-------------------------|---------------------|-------|-------|--------|-------------------|--------|-------|--------|------------------|-------|--------|-------|------------------|-------|--------|-------|-------|---|-------|--------------|
| | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | | | | |
| NOON | 0.5 | 0 | 0.5 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | | | | |
| 10:00 AM | 1 | 0 | 17 | 0 | 5 | 0 | 2 | 0 | 0 | 174 | 1 | 0 | 0 | 271 | 21 | 0 | | | 492 | |
| 10:15 AM | 2 | 0 | 13 | 0 | 3 | 0 | 5 | 0 | 1 | 193 | 0 | 0 | 0 | 262 | 19 | 0 | | | 498 | |
| 10:30 AM | 4 | 1 | 16 | 0 | 7 | 0 | 8 | 0 | 2 | 228 | 0 | 0 | 0 | 278 | 17 | 0 | | | 561 | |
| 10:45 AM | 4 | 0 | 13 | 0 | 6 | 0 | 3 | 0 | 0 | 200 | 0 | 0 | 0 | 263 | 13 | 0 | | | 502 | |
| 11:00 AM | 2 | 0 | 8 | 0 | 3 | 0 | 7 | 0 | 1 | 214 | 0 | 0 | 0 | 239 | 26 | 0 | | | 500 | |
| 11:15 AM | 1 | 0 | 22 | 0 | 1 | 0 | 5 | 0 | 3 | 236 | 0 | 2 | 0 | 274 | 17 | 0 | | | 561 | |
| 11:30 AM | 2 | 0 | 21 | 0 | 5 | 0 | 6 | 0 | 1 | 261 | 0 | 0 | 0 | 279 | 18 | 0 | | | 593 | |
| 11:45 AM | 0 | 1 | 21 | 0 | 1 | 0 | 10 | 1 | 2 | 239 | 0 | 0 | 0 | 261 | 21 | 0 | | | 557 | |
| 12:00 PM | 4 | 0 | 13 | 0 | 7 | 0 | 2 | 0 | 2 | 233 | 0 | 0 | 0 | 268 | 32 | 0 | | | 561 | |
| 12:15 PM | 2 | 0 | 28 | 0 | 4 | 0 | 7 | 1 | 3 | 262 | 0 | 0 | 0 | 274 | 28 | 1 | | | 610 | |
| 12:30 PM | 2 | 0 | 15 | 0 | 6 | 0 | 7 | 0 | 1 | 264 | 0 | 0 | 0 | 251 | 21 | 0 | | | 567 | |
| 12:45 PM | 2 | 0 | 15 | 0 | 3 | 0 | 15 | 0 | 4 | 289 | 0 | 0 | 0 | 264 | 21 | 0 | | | 613 | |
| 1:00 PM | 2 | 0 | 18 | 0 | 2 | 0 | 10 | 0 | 3 | 279 | 0 | 0 | 0 | 277 | 25 | 0 | | | 616 | |
| 1:15 PM | 2 | 0 | 21 | 0 | 4 | 0 | 9 | 0 | 2 | 274 | 0 | 0 | 0 | 292 | 22 | 0 | | | 626 | |
| 1:30 PM | 2 | 0 | 20 | 0 | 6 | 0 | 10 | 0 | 2 | 260 | 0 | 0 | 0 | 304 | 28 | 0 | | | 632 | |
| 1:45 PM | 1 | 0 | 18 | 0 | 6 | 0 | 5 | 0 | 3 | 278 | 1 | 0 | 0 | 275 | 33 | 0 | | | 620 | |
| TOTAL VOLUMES : | 33 | 2 | 279 | 0 | 69 | 0 | 111 | 2 | 30 | 3884 | 2 | 2 | 0 | 4332 | 362 | 1 | | | 9109 | |
| APPROACH %'s : | 10.51% | | 0.64% | 88.85% | 0.00% | 37.91% | 0.00% | 60.99% | 1.10% | 0.77% | 99.13% | 0.05% | 0.05% | 0.00% | 92.27% | 7.71% | | | 0.02% | |
| PEAK HR : | 01:00 PM - 02:00 PM | | | | | | | | | | | | | | | | | | | TOTAL |
| PEAK HR VOL : | 7 | 0 | 77 | 0 | 18 | 0 | 34 | 0 | 10 | 1091 | 1 | 0 | 0 | 1148 | 108 | 0 | | | 2494 | |
| PEAK HR FACTOR : | 0.875 | 0.000 | 0.917 | 0.000 | 0.750 | 0.000 | 0.850 | 0.000 | 0.833 | 0.978 | 0.250 | 0.000 | 0.000 | 0.944 | 0.818 | 0.000 | | | 0.987 | |
| | | | 0.913 | | | | 0.813 | | | 0.977 | | | | 0.946 | | | | | | |

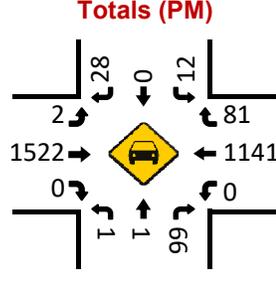
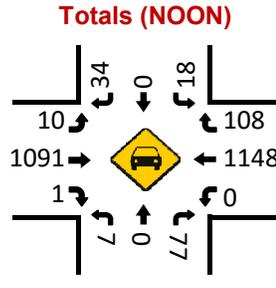
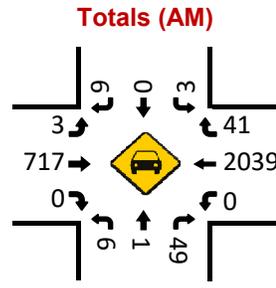
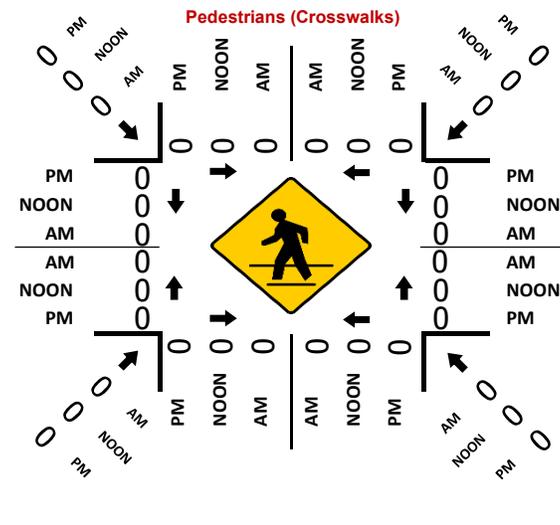
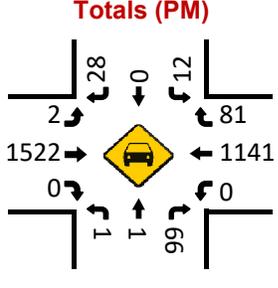
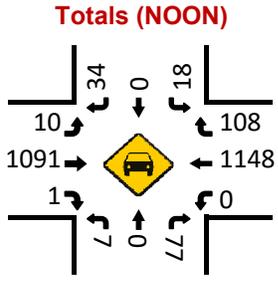
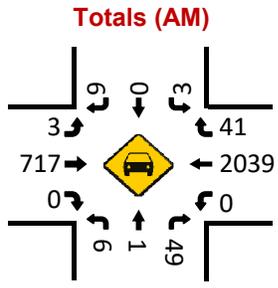
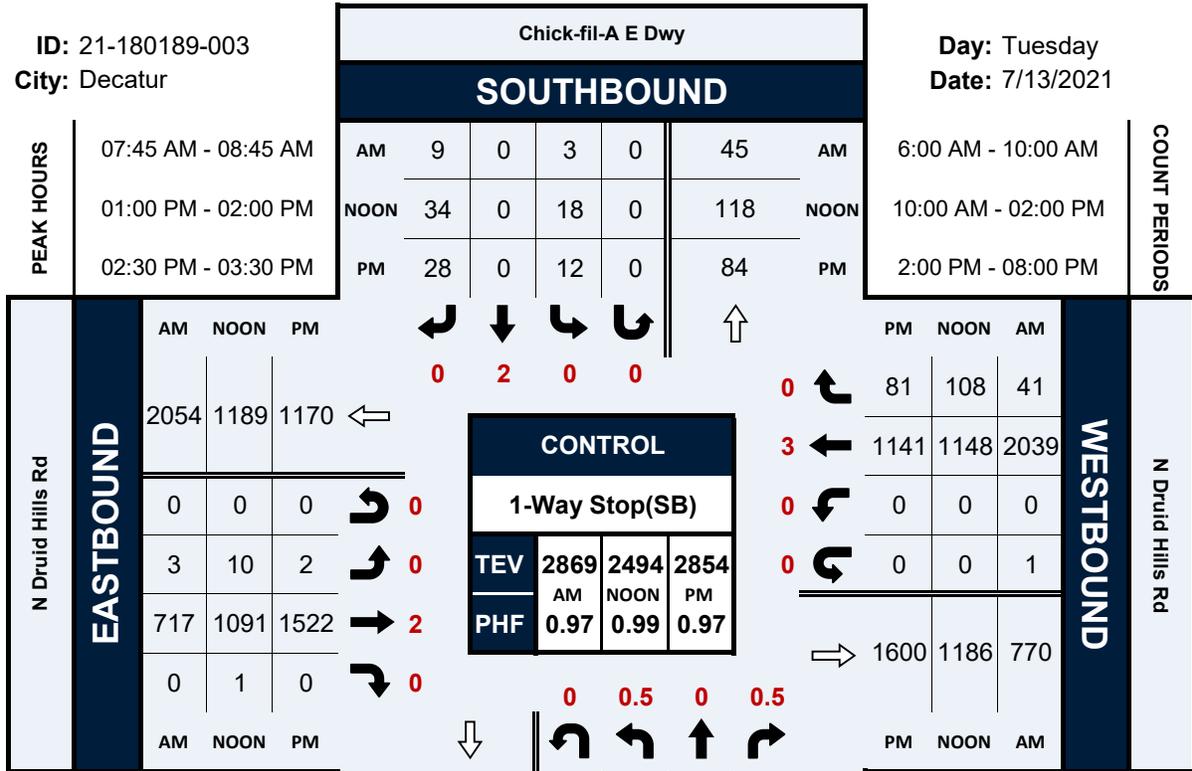
| NS/EW Streets: | Chick-fil-A E Dwy | | | | Chick-fil-A E Dwy | | | | N Druid Hills Rd | | | | N Druid Hills Rd | | | | TOTAL | | |
|----------------|-------------------|----|-----|----|-------------------|----|----|----|------------------|-----|----|----|------------------|-----|----|----|-------|---|-----|
| | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | | | |
| PM | 0.5 | 0 | 0.5 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | | | |
| 2:00 PM | 0 | 0 | 20 | 0 | 4 | 0 | 8 | 0 | 1 | 320 | 0 | 0 | 0 | 231 | 19 | 1 | | | 604 |
| 2:15 PM | 0 | 1 | 12 | 0 | 6 | 0 | 10 | 0 | 2 | 338 | 0 | 0 | 0 | 275 | 18 | 0 | | | 662 |
| 2:30 PM | 0 | 0 | 12 | 0 | 4 | 0 | 8 | 0 | 1 | 399 | 0 | 0 | 0 | 294 | 13 | 0 | | | 731 |
| 2:45 PM | 0 | 1 | 14 | 0 | 4 | 0 | 7 | 0 | 1 | 360 | 0 | 0 | 0 | 272 | 19 | 0 | | | 678 |
| 3:00 PM | 0 | 0 | 20 | 0 | 2 | 0 | 6 | 0 | 0 | 370 | 0 | 0 | 0 | 281 | 28 | 0 | | | 707 |
| 3:15 PM | 1 | 0 | 20 | 0 | 2 | 0 | 7 | 0 | 0 | 393 | 0 | 0 | 0 | 294 | 21 | 0 | | | 738 |
| 3:30 PM | 0 | 0 | 19 | 0 | 6 | 0 | 10 | 0 | 2 | 360 | 0 | 0 | 0 | 255 | 14 | 0 | | | 666 |
| 3:45 PM | 0 | 0 | 16 | 0 | 1 | 0 | 4 | 0 | 5 | 367 | 0 | 0 | 0 | 250 | 31 | 0 | | | 674 |
| 4:00 PM | 1 | 0 | 18 | 0 | 7 | 0 | 11 | 0 | 3 | 399 | 0 | 0 | 0 | 281 | 25 | 0 | | | 745 |
| 4:15 PM | 1 | 0 | 10 | 0 | 7 | 0 | 2 | 0 | 1 | 377 | 0 | 0 | 0 | 288 | 28 | 0 | | | 714 |
| 4:30 PM | 0 | 0 | 12 | 0 | 7 | 0 | 7 | 0 | 1 | 366 | 0 | 0 | 0 | 251 | 28 | 0 | | | 672 |
| 4:45 PM | 0 | 0 | 9 | 0 | 6 | 0 | 9 | 0 | 1 | 390 | 0 | 0 | 0 | 261 | 16 | 0 | | | 692 |
| 5:00 PM | 1 | 0 | 12 | 0 | 6 | 0 | 6 | 0 | 3 | 393 | 0 | 0 | 0 | 269 | 24 | 0 | | | 714 |
| 5:15 PM | 0 | 0 | 15 | 0 | 8 | 0 | 5 | 0 | 1 | 346 | 0 | 0 | 0 | 273 | 29 | 0 | | | 677 |
| 5:30 PM | 0 | 0 | 15 | 0 | 1 | 0 | 14 | 0 | 1 | 374 | 0 | 0 | 0 | 252 | 25 | 0 | | | 682 |
| 5:45 PM | 1 | 0 | 14 | 0 | 8 | 0 | 4 | 0 | 0 | 403 | 0 | 0 | 0 | 251 | 21 | 0 | | | 702 |
| 6:00 PM | 1 | 0 | 9 | 0 | 6 | 0 | 7 | 0 | 1 | 366 | 0 | 0 | 0 | 240 | 25 | 0 | | | 655 |
| 6:15 PM | 0 | 0 | 11 | 0 | 6 | 0 | 9 | 0 | 1 | 356 | 0 | 0 | 0 | 226 | 23 | 0 | | | 632 |
| 6:30 PM | 1 | 0 | 17 | 0 | 4 | 0 | 6 | 0 | 1 | 385 | 0 | 0 | 0 | 245 | 34 | 0 | | | 693 |
| 6:45 PM | 1 | 0 | 13 | 0 | 8 | 0 | 4 | 0 | 0 | 324 | 0 | 0 | 0 | 233 | 27 | 0 | | | 610 |
| 7:00 PM | 2 | 0 | 16 | 0 | 4 | 0 | 0 | 0 | 0 | 287 | 0 | 0 | 0 | 191 | 18 | 0 | | | 518 |
| 7:15 PM | 2 | 1 | 20 | 0 | 8 | 0 | 6 | 0 | 1 | 293 | 0 | 0 | 0 | 217 | 24 | 0 | | | 572 |
| 7:30 PM | 2 | 0 | 16 | 0 | 4 | 0 | 4 | 0 | 2 | 281 | 0 | 0 | 0 | 190 | 14 | 0 | | | 513 |
| 7:45 PM | 2 | 0 | 17 | 0 | 7 | 0 | 7 | 0 | 0 | 258 | 0 | 0 | 0 | 173 | 13 | | | | |

Chick-fil-A E Dwy & N Druid Hills Rd

Peak Hour Turning Movement Count

ID: 21-180189-003
City: Decatur

Day: Tuesday
Date: 7/13/2021



Appendix B: Synchro Analysis

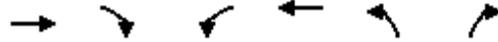
Intersection: 1: Birch Rd & North Druid Hills

| Movement | EB | EB | EB | WB | WB | NB | NB |
|-----------------------|-----|-----|----|------|------|-----|-----|
| Directions Served | T | T | R | LT | T | L | R |
| Maximum Queue (ft) | 193 | 144 | 50 | 213 | 231 | 83 | 20 |
| Average Queue (ft) | 99 | 51 | 5 | 58 | 67 | 20 | 2 |
| 95th Queue (ft) | 173 | 116 | 29 | 144 | 167 | 57 | 10 |
| Link Distance (ft) | 804 | 804 | | 1083 | 1083 | 311 | 311 |
| Upstream Blk Time (%) | | | | | | | |
| Queuing Penalty (veh) | | | | | | | |
| Storage Bay Dist (ft) | | | 85 | | | | |
| Storage Blk Time (%) | | 2 | | | | | |
| Queuing Penalty (veh) | | 1 | | | | | |

HCM 6th Signalized Intersection Summary

1: Birch Rd & North Druid Hills

11/23/2021



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--|------|---------|------|------|------|---------|
| Lane Configurations | ↑↑ | ↑ | | ↑↑ | ↑ | ↑ |
| Traffic Volume (veh/h) | 737 | 32 | 12 | 2030 | 25 | 3 |
| Future Volume (veh/h) | 737 | 32 | 12 | 2030 | 25 | 3 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 801 | 35 | 13 | 2207 | 27 | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 2580 | 1151 | 31 | 2513 | 350 | 312 |
| Arrive On Green | 0.73 | 0.73 | 1.00 | 1.00 | 0.20 | 0.20 |
| Sat Flow, veh/h | 3647 | 1585 | 9 | 3547 | 1781 | 1585 |
| Grp Volume(v), veh/h | 801 | 35 | 1191 | 1029 | 27 | 3 |
| Grp Sat Flow(s),veh/h/ln | 1777 | 1585 | 1854 | 1617 | 1781 | 1585 |
| Q Serve(g_s), s | 12.0 | 0.9 | 0.0 | 0.0 | 1.9 | 0.2 |
| Cycle Q Clear(g_c), s | 12.0 | 0.9 | 0.0 | 0.0 | 1.9 | 0.2 |
| Prop In Lane | | 1.00 | 0.01 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 2580 | 1151 | 1370 | 1174 | 350 | 312 |
| V/C Ratio(X) | 0.31 | 0.03 | 0.87 | 0.88 | 0.08 | 0.01 |
| Avail Cap(c_a), veh/h | 2580 | 1151 | 1370 | 1174 | 350 | 312 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.30 | 0.30 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 7.3 | 5.8 | 0.0 | 0.0 | 49.1 | 48.5 |
| Incr Delay (d2), s/veh | 0.3 | 0.0 | 2.5 | 3.1 | 0.4 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 4.3 | 0.3 | 1.0 | 1.0 | 0.9 | 0.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 7.6 | 5.8 | 2.5 | 3.1 | 49.6 | 48.5 |
| LnGrp LOS | A | A | A | A | D | D |
| Approach Vol, veh/h | 836 | | | 2220 | 30 | |
| Approach Delay, s/veh | 7.5 | | | 2.8 | 49.5 | |
| Approach LOS | A | | | A | D | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 115.0 | | 35.0 | | 115.0 |
| Change Period (Y+Rc), s | | * 6.1 | | 5.5 | | * 6.1 |
| Max Green Setting (Gmax), s | | * 1.1E2 | | 29.5 | | * 1.1E2 |
| Max Q Clear Time (g_c+I1), s | | 2.0 | | 3.9 | | 14.0 |
| Green Ext Time (p_c), s | | 48.2 | | 0.0 | | 6.4 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 4.5 | | | |
| HCM 6th LOS | | | A | | | |
| Notes | | | | | | |
| * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier. | | | | | | |

Intersection: 1: Birch Rd & North Druid Hills

| Movement | EB | EB | EB | WB | WB | NB | NB |
|-----------------------|-----|-----|----|------|------|-----|-----|
| Directions Served | T | T | R | LT | T | L | R |
| Maximum Queue (ft) | 239 | 209 | 45 | 140 | 124 | 80 | 26 |
| Average Queue (ft) | 134 | 84 | 7 | 31 | 18 | 19 | 6 |
| 95th Queue (ft) | 220 | 179 | 29 | 95 | 70 | 57 | 22 |
| Link Distance (ft) | 804 | 804 | | 1075 | 1075 | 536 | 536 |
| Upstream Blk Time (%) | | | | | | | |
| Queuing Penalty (veh) | | | | | | | |
| Storage Bay Dist (ft) | | | 85 | | | | |
| Storage Blk Time (%) | | 4 | 0 | | | | |
| Queuing Penalty (veh) | | 1 | 0 | | | | |

HCM 6th Signalized Intersection Summary

1: Birch Rd & North Druid Hills

11/23/2021



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--|------|---------|------|------|------|---------|
| Lane Configurations | ↑↑ | ↗ | | ↔ | ↖ | ↗ |
| Traffic Volume (veh/h) | 884 | 31 | 18 | 993 | 30 | 14 |
| Future Volume (veh/h) | 884 | 31 | 18 | 993 | 30 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 961 | 34 | 20 | 1079 | 33 | 15 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 2533 | 1130 | 49 | 2407 | 374 | 333 |
| Arrive On Green | 0.71 | 0.71 | 1.00 | 1.00 | 0.21 | 0.21 |
| Sat Flow, veh/h | 3647 | 1585 | 33 | 3462 | 1781 | 1585 |
| Grp Volume(v), veh/h | 961 | 34 | 578 | 521 | 33 | 15 |
| Grp Sat Flow(s),veh/h/ln | 1777 | 1585 | 1793 | 1617 | 1781 | 1585 |
| Q Serve(g_s), s | 16.0 | 0.9 | 0.0 | 0.0 | 2.2 | 1.1 |
| Cycle Q Clear(g_c), s | 16.0 | 0.9 | 0.0 | 0.0 | 2.2 | 1.1 |
| Prop In Lane | | 1.00 | 0.03 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 2533 | 1130 | 1303 | 1152 | 374 | 333 |
| V/C Ratio(X) | 0.38 | 0.03 | 0.44 | 0.45 | 0.09 | 0.05 |
| Avail Cap(c_a), veh/h | 2533 | 1130 | 1303 | 1152 | 374 | 333 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.84 | 0.84 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 8.5 | 6.3 | 0.0 | 0.0 | 47.7 | 47.3 |
| Incr Delay (d2), s/veh | 0.4 | 0.0 | 0.9 | 1.1 | 0.5 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.8 | 0.3 | 0.3 | 0.3 | 1.1 | 0.5 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 8.9 | 6.4 | 0.9 | 1.1 | 48.2 | 47.5 |
| LnGrp LOS | A | A | A | A | D | D |
| Approach Vol, veh/h | 995 | | | 1099 | 48 | |
| Approach Delay, s/veh | 8.8 | | | 1.0 | 48.0 | |
| Approach LOS | A | | | A | D | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 113.0 | | 37.0 | | 113.0 |
| Change Period (Y+Rc), s | | * 6.1 | | 5.5 | | * 6.1 |
| Max Green Setting (Gmax), s | | * 1.1E2 | | 31.5 | | * 1.1E2 |
| Max Q Clear Time (g_c+I1), s | | 2.0 | | 4.2 | | 18.0 |
| Green Ext Time (p_c), s | | 9.0 | | 0.1 | | 8.3 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 5.7 | | | |
| HCM 6th LOS | | | A | | | |
| Notes | | | | | | |
| * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier. | | | | | | |

Intersection: 1: Birch Rd & North Druid Hills

| Movement | EB | EB | EB | WB | WB | NB | NB |
|-----------------------|------|------|-----|------|------|-----|-----|
| Directions Served | T | T | R | LT | T | L | R |
| Maximum Queue (ft) | 4633 | 4613 | 125 | 217 | 235 | 89 | 40 |
| Average Queue (ft) | 2134 | 2145 | 69 | 52 | 52 | 35 | 7 |
| 95th Queue (ft) | 4539 | 4532 | 168 | 160 | 166 | 77 | 27 |
| Link Distance (ft) | 4950 | 4950 | | 1027 | 1027 | 498 | 498 |
| Upstream Blk Time (%) | 3 | 3 | | | | | |
| Queuing Penalty (veh) | 0 | 0 | | | | | |
| Storage Bay Dist (ft) | | | 85 | | | | |
| Storage Blk Time (%) | | 46 | 0 | | | | |
| Queuing Penalty (veh) | | 36 | 0 | | | | |

HCM 6th Signalized Intersection Summary

1: Birch Rd & North Druid Hills

11/23/2021



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--|-------|---------|-------|------|------|---------|
| Lane Configurations | ↑↑ | ↗ | | ↑↑ | ↖ | ↗ |
| Traffic Volume (veh/h) | 2040 | 79 | 12 | 1166 | 43 | 10 |
| Future Volume (veh/h) | 2040 | 79 | 12 | 1166 | 43 | 10 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1477 | 1477 | 1477 | 1477 | 1477 | 1477 |
| Adj Flow Rate, veh/h | 2103 | 86 | 13 | 1267 | 47 | 11 |
| Peak Hour Factor | 0.97 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 2127 | 949 | 22 | 1594 | 244 | 217 |
| Arrive On Green | 0.76 | 0.76 | 1.00 | 1.00 | 0.17 | 0.17 |
| Sat Flow, veh/h | 2879 | 1251 | 1 | 2169 | 1406 | 1251 |
| Grp Volume(v), veh/h | 2103 | 86 | 651 | 629 | 47 | 11 |
| Grp Sat Flow(s),veh/h/ln | 1403 | 1251 | 827 | 1277 | 1406 | 1251 |
| Q Serve(g_s), s | 123.0 | 3.0 | 5.9 | 0.0 | 4.9 | 1.2 |
| Cycle Q Clear(g_c), s | 123.0 | 3.0 | 128.9 | 0.0 | 4.9 | 1.2 |
| Prop In Lane | | 1.00 | 0.02 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 2127 | 949 | 648 | 968 | 244 | 217 |
| V/C Ratio(X) | 0.99 | 0.09 | 1.00 | 0.65 | 0.19 | 0.05 |
| Avail Cap(c_a), veh/h | 2127 | 949 | 648 | 968 | 244 | 217 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.75 | 0.75 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 19.8 | 5.3 | 41.8 | 0.0 | 60.1 | 58.6 |
| Incr Delay (d2), s/veh | 17.0 | 0.2 | 31.5 | 2.6 | 1.8 | 0.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 39.1 | 0.8 | 26.5 | 0.7 | 1.9 | 0.4 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 36.8 | 5.5 | 73.2 | 2.6 | 61.8 | 59.0 |
| LnGrp LOS | D | A | F | A | E | E |
| Approach Vol, veh/h | 2189 | | | 1280 | 58 | |
| Approach Delay, s/veh | 35.6 | | | 38.5 | 61.3 | |
| Approach LOS | D | | | D | E | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 135.0 | | 35.0 | | 135.0 |
| Change Period (Y+Rc), s | | * 6.1 | | 5.5 | | * 6.1 |
| Max Green Setting (Gmax), s | | * 1.3E2 | | 29.5 | | * 1.3E2 |
| Max Q Clear Time (g_c+1), s | | 130.9 | | 6.9 | | 125.0 |
| Green Ext Time (p_c), s | | 0.0 | | 0.1 | | 3.5 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 37.1 | | | |
| HCM 6th LOS | | | D | | | |
| Notes | | | | | | |
| * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier. | | | | | | |

Intersection: 1: Birch Rd & North Druid Hills

| Movement | EB | EB | EB | WB | WB | NB | NB |
|-----------------------|-----|-----|----|-----|-----|-----|-----|
| Directions Served | T | T | R | LT | T | L | R |
| Maximum Queue (ft) | 214 | 192 | 94 | 175 | 211 | 105 | 49 |
| Average Queue (ft) | 109 | 61 | 13 | 102 | 104 | 39 | 11 |
| 95th Queue (ft) | 186 | 147 | 49 | 183 | 200 | 84 | 37 |
| Link Distance (ft) | 804 | 804 | | 156 | 156 | 122 | 122 |
| Upstream Blk Time (%) | | | | 5 | 6 | 1 | |
| Queuing Penalty (veh) | | | | 52 | 59 | 0 | |
| Storage Bay Dist (ft) | | | 85 | | | | |
| Storage Blk Time (%) | | 2 | | | | | |
| Queuing Penalty (veh) | | 1 | | | | | |

Intersection: 2: DW1 & North Druid Hills

| Movement | WB | WB | NB |
|-----------------------|-----|-----|-----|
| Directions Served | T | T | R |
| Maximum Queue (ft) | 240 | 213 | 42 |
| Average Queue (ft) | 29 | 27 | 18 |
| 95th Queue (ft) | 134 | 123 | 38 |
| Link Distance (ft) | 868 | 868 | 123 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

Intersection: 3: Birch Rd & DW2

| Movement | WB | NB | SB |
|-----------------------|-----|-----|-----|
| Directions Served | LR | TR | LT |
| Maximum Queue (ft) | 54 | 4 | 35 |
| Average Queue (ft) | 27 | 0 | 4 |
| 95th Queue (ft) | 50 | 3 | 21 |
| Link Distance (ft) | 130 | 282 | 122 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

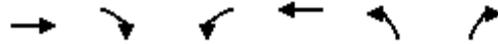
Zone Summary

Zone wide Queuing Penalty: 112

HCM 6th Signalized Intersection Summary

1: Birch Rd & North Druid Hills

11/23/2021



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--|------|---------|------|------|------|---------|
| Lane Configurations | ↑↑ | ↑ | | ↑↑ | ↑ | ↑ |
| Traffic Volume (veh/h) | 746 | 60 | 49 | 2030 | 51 | 29 |
| Future Volume (veh/h) | 746 | 60 | 49 | 2030 | 51 | 29 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 811 | 65 | 53 | 2207 | 55 | 32 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 2580 | 1151 | 69 | 2401 | 350 | 312 |
| Arrive On Green | 0.73 | 0.73 | 1.00 | 1.00 | 0.20 | 0.20 |
| Sat Flow, veh/h | 3647 | 1585 | 61 | 3393 | 1781 | 1585 |
| Grp Volume(v), veh/h | 811 | 65 | 1213 | 1047 | 55 | 32 |
| Grp Sat Flow(s),veh/h/ln | 1777 | 1585 | 1751 | 1617 | 1781 | 1585 |
| Q Serve(g_s), s | 12.2 | 1.8 | 0.0 | 0.0 | 3.8 | 2.5 |
| Cycle Q Clear(g_c), s | 12.2 | 1.8 | 0.0 | 0.0 | 3.8 | 2.5 |
| Prop In Lane | | 1.00 | 0.04 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 2580 | 1151 | 1297 | 1174 | 350 | 312 |
| V/C Ratio(X) | 0.31 | 0.06 | 0.94 | 0.89 | 0.16 | 0.10 |
| Avail Cap(c_a), veh/h | 2580 | 1151 | 1297 | 1174 | 350 | 312 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 7.3 | 5.9 | 0.0 | 0.0 | 49.9 | 49.4 |
| Incr Delay (d2), s/veh | 0.3 | 0.1 | 13.6 | 10.4 | 1.0 | 0.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 4.4 | 0.6 | 4.9 | 3.4 | 1.8 | 1.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 7.6 | 6.0 | 13.6 | 10.4 | 50.9 | 50.1 |
| LnGrp LOS | A | A | B | B | D | D |
| Approach Vol, veh/h | 876 | | | 2260 | 87 | |
| Approach Delay, s/veh | 7.5 | | | 12.2 | 50.6 | |
| Approach LOS | A | | | B | D | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 115.0 | | 35.0 | | 115.0 |
| Change Period (Y+Rc), s | | * 6.1 | | 5.5 | | * 6.1 |
| Max Green Setting (Gmax), s | | * 1.1E2 | | 29.5 | | * 1.1E2 |
| Max Q Clear Time (g_c+I1), s | | 2.0 | | 5.8 | | 14.2 |
| Green Ext Time (p_c), s | | 52.7 | | 0.2 | | 6.6 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 11.9 | | | |
| HCM 6th LOS | | | B | | | |
| Notes | | | | | | |
| * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier. | | | | | | |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.1 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑↑ | ↑ | | ↑↑ | | ↑ |
| Traffic Vol, veh/h | 766 | 9 | 0 | 2079 | 0 | 35 |
| Future Vol, veh/h | 766 | 9 | 0 | 2079 | 0 | 35 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 833 | 10 | 0 | 2260 | 0 | 38 |

| Major/Minor | Major1 | Major2 | Minor1 | | | |
|----------------------|--------|--------|--------|---|---|------|
| Conflicting Flow All | 0 | 0 | - | - | - | 417 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.32 |
| Pot Cap-1 Maneuver | - | - | 0 | - | 0 | 585 |
| Stage 1 | - | - | 0 | - | 0 | - |
| Stage 2 | - | - | 0 | - | 0 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | - | - | - | 585 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 11.6 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|-----------------------|-------|-----|-----|-----|
| Capacity (veh/h) | 585 | - | - | - |
| HCM Lane V/C Ratio | 0.065 | - | - | - |
| HCM Control Delay (s) | 11.6 | - | - | - |
| HCM Lane LOS | B | - | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 4.7 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 53 | 28 | 9 | 65 | 44 |
| Future Vol, veh/h | 0 | 53 | 28 | 9 | 65 | 44 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 58 | 30 | 10 | 71 | 48 |

| Major/Minor | Minor1 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|-------|---|
| Conflicting Flow All | 225 | 20 | 0 | 0 | 40 | 0 |
| Stage 1 | 35 | - | - | - | - | - |
| Stage 2 | 190 | - | - | - | - | - |
| Critical Hdwy | 6.63 | 6.93 | - | - | 4.13 | - |
| Critical Hdwy Stg 1 | 5.83 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.43 | - | - | - | - | - |
| Follow-up Hdwy | 3.519 | 3.319 | - | - | 2.219 | - |
| Pot Cap-1 Maneuver | 753 | 1053 | - | - | 1569 | - |
| Stage 1 | 983 | - | - | - | - | - |
| Stage 2 | 842 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | - | - |
| Mov Cap-1 Maneuver | 718 | 1053 | - | - | 1569 | - |
| Mov Cap-2 Maneuver | 718 | - | - | - | - | - |
| Stage 1 | 983 | - | - | - | - | - |
| Stage 2 | 803 | - | - | - | - | - |

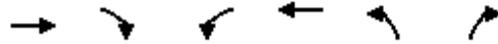
| Approach | WB | NB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 8.6 | 0 | 4.4 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 1053 | 1569 |
| HCM Lane V/C Ratio | - | - | 0.055 | 0.045 |
| HCM Control Delay (s) | - | - | 8.6 | 7.4 |
| HCM Lane LOS | - | - | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 0.1 |

HCM 6th Signalized Intersection Summary

1: Birch Rd & North Druid Hills

11/23/2021



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--|------|---------|------|------|------|---------|
| Lane Configurations | ↑↑ | ↑ | | ↑↑ | ↑ | ↑ |
| Traffic Volume (veh/h) | 746 | 60 | 49 | 2030 | 51 | 29 |
| Future Volume (veh/h) | 746 | 60 | 49 | 2030 | 51 | 29 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 811 | 65 | 53 | 2207 | 55 | 32 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 3117 | 1390 | 78 | 2902 | 81 | 72 |
| Arrive On Green | 0.88 | 0.88 | 1.00 | 1.00 | 0.05 | 0.05 |
| Sat Flow, veh/h | 3647 | 1585 | 61 | 3393 | 1781 | 1585 |
| Grp Volume(v), veh/h | 811 | 65 | 1212 | 1048 | 55 | 32 |
| Grp Sat Flow(s),veh/h/ln | 1777 | 1585 | 1752 | 1617 | 1781 | 1585 |
| Q Serve(g_s), s | 5.4 | 0.8 | 0.0 | 0.0 | 4.6 | 3.0 |
| Cycle Q Clear(g_c), s | 5.4 | 0.8 | 0.0 | 0.0 | 4.6 | 3.0 |
| Prop In Lane | | 1.00 | 0.04 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 3117 | 1390 | 1562 | 1418 | 81 | 72 |
| V/C Ratio(X) | 0.26 | 0.05 | 0.78 | 0.74 | 0.68 | 0.44 |
| Avail Cap(c_a), veh/h | 3117 | 1390 | 1562 | 1418 | 350 | 312 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 1.5 | 1.2 | 0.0 | 0.0 | 70.5 | 69.7 |
| Incr Delay (d2), s/veh | 0.2 | 0.1 | 3.9 | 3.5 | 9.6 | 4.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.0 | 0.1 | 1.7 | 1.4 | 2.3 | 1.3 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 1.7 | 1.2 | 3.9 | 3.5 | 80.1 | 74.0 |
| LnGrp LOS | A | A | A | A | F | E |
| Approach Vol, veh/h | 876 | | | 2260 | 87 | |
| Approach Delay, s/veh | 1.6 | | | 3.7 | 77.8 | |
| Approach LOS | A | | | A | E | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 137.7 | | 12.3 | | 137.7 |
| Change Period (Y+Rc), s | | * 6.1 | | 5.5 | | * 6.1 |
| Max Green Setting (Gmax), s | | * 1.1E2 | | 29.5 | | * 1.1E2 |
| Max Q Clear Time (g_c+I1), s | | 2.0 | | 6.6 | | 7.4 |
| Green Ext Time (p_c), s | | 52.7 | | 0.2 | | 6.6 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 5.1 | | | |
| HCM 6th LOS | | | A | | | |
| Notes | | | | | | |
| * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier. | | | | | | |

HCM 6th TWSC
2: DW1 & North Druid Hills

11/23/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.1 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑↑ | ↑ | | ↑↑ | | ↑ |
| Traffic Vol, veh/h | 766 | 9 | 0 | 2079 | 0 | 35 |
| Future Vol, veh/h | 766 | 9 | 0 | 2079 | 0 | 35 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 833 | 10 | 0 | 2260 | 0 | 38 |

| Major/Minor | Major1 | Major2 | Minor1 | | | |
|----------------------|--------|--------|--------|---|---|------|
| Conflicting Flow All | 0 | 0 | - | - | - | 417 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.32 |
| Pot Cap-1 Maneuver | - | - | 0 | - | 0 | 585 |
| Stage 1 | - | - | 0 | - | 0 | - |
| Stage 2 | - | - | 0 | - | 0 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | - | - | - | 585 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 11.6 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|-----------------------|-------|-----|-----|-----|
| Capacity (veh/h) | 585 | - | - | - |
| HCM Lane V/C Ratio | 0.065 | - | - | - |
| HCM Control Delay (s) | 11.6 | - | - | - |
| HCM Lane LOS | B | - | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 4.7 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 53 | 28 | 9 | 65 | 44 |
| Future Vol, veh/h | 0 | 53 | 28 | 9 | 65 | 44 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 58 | 30 | 10 | 71 | 48 |

| Major/Minor | Minor1 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|-------|---|
| Conflicting Flow All | 225 | 20 | 0 | 0 | 40 | 0 |
| Stage 1 | 35 | - | - | - | - | - |
| Stage 2 | 190 | - | - | - | - | - |
| Critical Hdwy | 6.63 | 6.93 | - | - | 4.13 | - |
| Critical Hdwy Stg 1 | 5.83 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.43 | - | - | - | - | - |
| Follow-up Hdwy | 3.519 | 3.319 | - | - | 2.219 | - |
| Pot Cap-1 Maneuver | 753 | 1053 | - | - | 1569 | - |
| Stage 1 | 983 | - | - | - | - | - |
| Stage 2 | 842 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | - | - |
| Mov Cap-1 Maneuver | 718 | 1053 | - | - | 1569 | - |
| Mov Cap-2 Maneuver | 718 | - | - | - | - | - |
| Stage 1 | 983 | - | - | - | - | - |
| Stage 2 | 803 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 8.6 | 0 | 4.4 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 1053 | 1569 |
| HCM Lane V/C Ratio | - | - | 0.055 | 0.045 |
| HCM Control Delay (s) | - | - | 8.6 | 7.4 |
| HCM Lane LOS | - | - | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 0.1 |

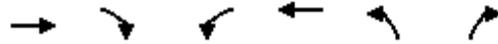
Intersection: 1: Birch Rd & North Druid Hills

| Movement | EB | EB | EB | WB | WB | NB | NB |
|-----------------------|-----|-----|----|-----|-----|-----|-----|
| Directions Served | T | T | R | LT | T | L | R |
| Maximum Queue (ft) | 138 | 127 | 53 | 162 | 153 | 118 | 31 |
| Average Queue (ft) | 43 | 21 | 8 | 51 | 45 | 61 | 4 |
| 95th Queue (ft) | 105 | 72 | 31 | 132 | 134 | 115 | 20 |
| Link Distance (ft) | 804 | 804 | | 156 | 156 | 122 | 122 |
| Upstream Blk Time (%) | | | | 0 | 0 | 2 | |
| Queuing Penalty (veh) | | | | 5 | 0 | 1 | |
| Storage Bay Dist (ft) | | | 85 | | | | |
| Storage Blk Time (%) | | 0 | | | | | |
| Queuing Penalty (veh) | | 0 | | | | | |

HCM 6th Signalized Intersection Summary

1: Birch Rd & North Druid Hills

11/29/2021



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------------|------|---------|------|------|------|---------|
| Lane Configurations | ↑↑ | ↑ | | ↑↑ | ↑ | ↑ |
| Traffic Volume (veh/h) | 746 | 60 | 49 | 2030 | 51 | 29 |
| Future Volume (veh/h) | 746 | 60 | 49 | 2030 | 51 | 29 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 811 | 65 | 53 | 2207 | 55 | 32 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 3117 | 1390 | 78 | 2902 | 81 | 72 |
| Arrive On Green | 0.88 | 0.88 | 1.00 | 1.00 | 0.05 | 0.05 |
| Sat Flow, veh/h | 3647 | 1585 | 61 | 3393 | 1781 | 1585 |
| Grp Volume(v), veh/h | 811 | 65 | 1212 | 1048 | 55 | 32 |
| Grp Sat Flow(s),veh/h/ln | 1777 | 1585 | 1752 | 1617 | 1781 | 1585 |
| Q Serve(g_s), s | 5.4 | 0.8 | 0.0 | 0.0 | 4.6 | 3.0 |
| Cycle Q Clear(g_c), s | 5.4 | 0.8 | 0.0 | 0.0 | 4.6 | 3.0 |
| Prop In Lane | | 1.00 | 0.04 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 3117 | 1390 | 1562 | 1418 | 81 | 72 |
| V/C Ratio(X) | 0.26 | 0.05 | 0.78 | 0.74 | 0.68 | 0.44 |
| Avail Cap(c_a), veh/h | 3117 | 1390 | 1562 | 1418 | 232 | 206 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 1.5 | 1.2 | 0.0 | 0.0 | 70.5 | 69.7 |
| Incr Delay (d2), s/veh | 0.2 | 0.1 | 3.9 | 3.5 | 9.6 | 4.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.0 | 0.1 | 1.7 | 1.4 | 2.3 | 1.3 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 1.7 | 1.2 | 3.9 | 3.5 | 80.1 | 74.0 |
| LnGrp LOS | A | A | A | A | F | E |
| Approach Vol, veh/h | 876 | | | 2260 | 87 | |
| Approach Delay, s/veh | 1.6 | | | 3.7 | 77.8 | |
| Approach LOS | A | | | A | E | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 137.7 | | 12.3 | | 137.7 |
| Change Period (Y+Rc), s | | * 6.1 | | 5.5 | | * 6.1 |
| Max Green Setting (Gmax), s | | * 1.2E2 | | 19.5 | | * 1.2E2 |
| Max Q Clear Time (g_c+I1), s | | 2.0 | | 6.6 | | 7.4 |
| Green Ext Time (p_c), s | | 54.6 | | 0.1 | | 6.6 |

Intersection Summary

| | |
|--------------------|-----|
| HCM 6th Ctrl Delay | 5.1 |
| HCM 6th LOS | A |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection: 1: Birch Rd & North Druid Hills

| Movement | EB | EB | EB | WB | WB | NB | NB |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|
| Directions Served | T | T | R | LT | T | L | R |
| Maximum Queue (ft) | 245 | 210 | 120 | 168 | 194 | 109 | 64 |
| Average Queue (ft) | 135 | 92 | 19 | 98 | 66 | 45 | 28 |
| 95th Queue (ft) | 221 | 180 | 64 | 176 | 173 | 93 | 57 |
| Link Distance (ft) | 804 | 804 | | 157 | 157 | 123 | 123 |
| Upstream Blk Time (%) | | | | 2 | 1 | 1 | |
| Queuing Penalty (veh) | | | | 11 | 4 | 0 | |
| Storage Bay Dist (ft) | | | 85 | | | | |
| Storage Blk Time (%) | | 5 | 0 | | | | |
| Queuing Penalty (veh) | | 3 | 0 | | | | |

Intersection: 2: DW1 & North Druid Hills

| Movement | WB | WB | NB |
|-----------------------|-----|-----|----|
| Directions Served | T | T | R |
| Maximum Queue (ft) | 150 | 119 | 56 |
| Average Queue (ft) | 19 | 10 | 24 |
| 95th Queue (ft) | 88 | 63 | 47 |
| Link Distance (ft) | 860 | 860 | 68 |
| Upstream Blk Time (%) | | | 0 |
| Queuing Penalty (veh) | | | 0 |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

Intersection: 3: Birch Rd & DW2

| Movement | WB | SB |
|-----------------------|-----|-----|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 68 | 60 |
| Average Queue (ft) | 30 | 10 |
| 95th Queue (ft) | 54 | 38 |
| Link Distance (ft) | 123 | 123 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

Zone Summary

Zone wide Queuing Penalty: 18

HCM 6th Signalized Intersection Summary

1: Birch Rd & North Druid Hills

11/23/2021



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------------|------|-------|------|------|------|-------|
| Lane Configurations | ↑↑ | ↑ | | ↑↑ | ↑ | ↑ |
| Traffic Volume (veh/h) | 898 | 74 | 90 | 993 | 57 | 54 |
| Future Volume (veh/h) | 898 | 74 | 90 | 993 | 57 | 54 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 976 | 80 | 98 | 1079 | 62 | 59 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 2559 | 1141 | 173 | 1902 | 380 | 338 |
| Arrive On Green | 0.72 | 0.72 | 1.00 | 1.00 | 0.21 | 0.21 |
| Sat Flow, veh/h | 3647 | 1585 | 201 | 2727 | 1781 | 1585 |
| Grp Volume(v), veh/h | 976 | 80 | 534 | 643 | 62 | 59 |
| Grp Sat Flow(s),veh/h/ln | 1777 | 1585 | 1225 | 1617 | 1781 | 1585 |
| Q Serve(g_s), s | 15.9 | 2.2 | 11.4 | 0.0 | 4.3 | 4.6 |
| Cycle Q Clear(g_c), s | 15.9 | 2.2 | 27.3 | 0.0 | 4.3 | 4.6 |
| Prop In Lane | | 1.00 | 0.18 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 2559 | 1141 | 911 | 1164 | 380 | 338 |
| V/C Ratio(X) | 0.38 | 0.07 | 0.59 | 0.55 | 0.16 | 0.17 |
| Avail Cap(c_a), veh/h | 2559 | 1141 | 911 | 1164 | 380 | 338 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 8.1 | 6.2 | 0.8 | 0.0 | 48.1 | 48.2 |
| Incr Delay (d2), s/veh | 0.4 | 0.1 | 2.8 | 1.9 | 0.9 | 1.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.7 | 0.7 | 0.7 | 0.6 | 2.0 | 1.9 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 8.5 | 6.3 | 3.5 | 1.9 | 49.0 | 49.3 |
| LnGrp LOS | A | A | A | A | D | D |
| Approach Vol, veh/h | 1056 | | | 1177 | 121 | |
| Approach Delay, s/veh | 8.4 | | | 2.6 | 49.2 | |
| Approach LOS | A | | | A | D | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 113.0 | | 37.0 | | 113.0 |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | | 5.0 |
| Max Green Setting (Gmax), s | | 108.0 | | 32.0 | | 108.0 |
| Max Q Clear Time (g_c+I1), s | | 29.3 | | 6.6 | | 17.9 |
| Green Ext Time (p_c), s | | 11.7 | | 0.3 | | 8.7 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 7.6 | | | |
| HCM 6th LOS | | | A | | | |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.4 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑↑ | ↑ | | ↑↑ | | ↑ |
| Traffic Vol, veh/h | 938 | 14 | 0 | 1083 | 0 | 67 |
| Future Vol, veh/h | 938 | 14 | 0 | 1083 | 0 | 67 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1020 | 15 | 0 | 1177 | 0 | 73 |

| Major/Minor | Major1 | Major2 | Minor1 | | | |
|----------------------|--------|--------|--------|---|---|------|
| Conflicting Flow All | 0 | 0 | - | - | - | 510 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.32 |
| Pot Cap-1 Maneuver | - | - | 0 | - | 0 | 509 |
| Stage 1 | - | - | 0 | - | 0 | - |
| Stage 2 | - | - | 0 | - | 0 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | - | - | - | 509 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 13.3 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|-----------------------|-------|-----|-----|-----|
| Capacity (veh/h) | 509 | - | - | - |
| HCM Lane V/C Ratio | 0.143 | - | - | - |
| HCM Control Delay (s) | 13.3 | - | - | - |
| HCM Lane LOS | B | - | - | - |
| HCM 95th %tile Q(veh) | 0.5 | - | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 5 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 67 | 44 | 14 | 114 | 49 |
| Future Vol, veh/h | 0 | 67 | 44 | 14 | 114 | 49 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 73 | 48 | 15 | 124 | 53 |

| Major/Minor | Minor1 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|-------|---|
| Conflicting Flow All | 357 | 32 | 0 | 0 | 63 | 0 |
| Stage 1 | 56 | - | - | - | - | - |
| Stage 2 | 301 | - | - | - | - | - |
| Critical Hdwy | 6.63 | 6.93 | - | - | 4.13 | - |
| Critical Hdwy Stg 1 | 5.83 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.43 | - | - | - | - | - |
| Follow-up Hdwy | 3.519 | 3.319 | - | - | 2.219 | - |
| Pot Cap-1 Maneuver | 628 | 1035 | - | - | 1539 | - |
| Stage 1 | 960 | - | - | - | - | - |
| Stage 2 | 750 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | - | - |
| Mov Cap-1 Maneuver | 576 | 1035 | - | - | 1539 | - |
| Mov Cap-2 Maneuver | 576 | - | - | - | - | - |
| Stage 1 | 960 | - | - | - | - | - |
| Stage 2 | 688 | - | - | - | - | - |

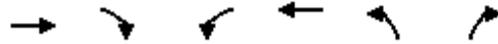
| Approach | WB | NB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 8.7 | 0 | 5.3 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|------|-------|
| Capacity (veh/h) | - | - | 1035 | 1539 |
| HCM Lane V/C Ratio | - | - | 0.07 | 0.081 |
| HCM Control Delay (s) | - | - | 8.7 | 7.5 |
| HCM Lane LOS | - | - | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 0.3 |

HCM 6th Signalized Intersection Summary

1: Birch Rd & North Druid Hills

11/23/2021



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------------|------|-------|------|------|------|-------|
| Lane Configurations | ↑↑ | ↑ | | ↑↑ | ↑ | ↑ |
| Traffic Volume (veh/h) | 898 | 74 | 90 | 993 | 57 | 54 |
| Future Volume (veh/h) | 898 | 74 | 90 | 993 | 57 | 54 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 976 | 80 | 98 | 1079 | 62 | 59 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 3133 | 1397 | 222 | 2397 | 92 | 82 |
| Arrive On Green | 0.88 | 0.88 | 1.00 | 1.00 | 0.05 | 0.05 |
| Sat Flow, veh/h | 3647 | 1585 | 219 | 2805 | 1781 | 1585 |
| Grp Volume(v), veh/h | 976 | 80 | 534 | 643 | 62 | 59 |
| Grp Sat Flow(s),veh/h/ln | 1777 | 1585 | 1322 | 1617 | 1781 | 1585 |
| Q Serve(g_s), s | 6.7 | 0.9 | 0.0 | 0.0 | 5.1 | 5.5 |
| Cycle Q Clear(g_c), s | 6.7 | 0.9 | 0.0 | 0.0 | 5.1 | 5.5 |
| Prop In Lane | | 1.00 | 0.18 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 3133 | 1397 | 1194 | 1425 | 92 | 82 |
| V/C Ratio(X) | 0.31 | 0.06 | 0.45 | 0.45 | 0.67 | 0.72 |
| Avail Cap(c_a), veh/h | 3133 | 1397 | 1194 | 1425 | 380 | 338 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 1.5 | 1.1 | 0.0 | 0.0 | 69.9 | 70.0 |
| Incr Delay (d2), s/veh | 0.3 | 0.1 | 1.2 | 1.0 | 8.2 | 11.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.2 | 0.2 | 0.4 | 0.4 | 2.6 | 2.5 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 1.7 | 1.2 | 1.2 | 1.0 | 78.1 | 81.2 |
| LnGrp LOS | A | A | A | A | E | F |
| Approach Vol, veh/h | 1056 | | | 1177 | 121 | |
| Approach Delay, s/veh | 1.7 | | | 1.1 | 79.6 | |
| Approach LOS | A | | | A | E | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 137.2 | | 12.8 | | 137.2 |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | | 5.0 |
| Max Green Setting (Gmax), s | | 108.0 | | 32.0 | | 108.0 |
| Max Q Clear Time (g_c+I1), s | | 2.0 | | 7.5 | | 8.7 |
| Green Ext Time (p_c), s | | 11.7 | | 0.3 | | 8.7 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 5.4 | | | |
| HCM 6th LOS | | | A | | | |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.4 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑↑ | ↑ | | ↑↑ | | ↑ |
| Traffic Vol, veh/h | 938 | 14 | 0 | 1083 | 0 | 67 |
| Future Vol, veh/h | 938 | 14 | 0 | 1083 | 0 | 67 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1020 | 15 | 0 | 1177 | 0 | 73 |

| Major/Minor | Major1 | Major2 | Minor1 | | | |
|----------------------|--------|--------|--------|---|---|------|
| Conflicting Flow All | 0 | 0 | - | - | - | 510 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.32 |
| Pot Cap-1 Maneuver | - | - | 0 | - | 0 | 509 |
| Stage 1 | - | - | 0 | - | 0 | - |
| Stage 2 | - | - | 0 | - | 0 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | - | - | - | 509 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 13.3 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|-----------------------|-------|-----|-----|-----|
| Capacity (veh/h) | 509 | - | - | - |
| HCM Lane V/C Ratio | 0.143 | - | - | - |
| HCM Control Delay (s) | 13.3 | - | - | - |
| HCM Lane LOS | B | - | - | - |
| HCM 95th %tile Q(veh) | 0.5 | - | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 5 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 67 | 44 | 14 | 114 | 49 |
| Future Vol, veh/h | 0 | 67 | 44 | 14 | 114 | 49 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 73 | 48 | 15 | 124 | 53 |

| Major/Minor | Minor1 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|-------|---|
| Conflicting Flow All | 357 | 32 | 0 | 0 | 63 | 0 |
| Stage 1 | 56 | - | - | - | - | - |
| Stage 2 | 301 | - | - | - | - | - |
| Critical Hdwy | 6.63 | 6.93 | - | - | 4.13 | - |
| Critical Hdwy Stg 1 | 5.83 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.43 | - | - | - | - | - |
| Follow-up Hdwy | 3.519 | 3.319 | - | - | 2.219 | - |
| Pot Cap-1 Maneuver | 628 | 1035 | - | - | 1539 | - |
| Stage 1 | 960 | - | - | - | - | - |
| Stage 2 | 750 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | - | - |
| Mov Cap-1 Maneuver | 576 | 1035 | - | - | 1539 | - |
| Mov Cap-2 Maneuver | 576 | - | - | - | - | - |
| Stage 1 | 960 | - | - | - | - | - |
| Stage 2 | 688 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 8.7 | 0 | 5.3 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|------|-------|
| Capacity (veh/h) | - | - | 1035 | 1539 |
| HCM Lane V/C Ratio | - | - | 0.07 | 0.081 |
| HCM Control Delay (s) | - | - | 8.7 | 7.5 |
| HCM Lane LOS | - | - | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 0.3 |

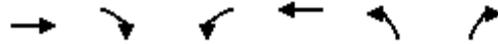
Intersection: 1: Birch Rd & North Druid Hills

| Movement | EB | EB | EB | WB | WB | NB | NB |
|-----------------------|-----|-----|----|-----|-----|-----|-----|
| Directions Served | T | T | R | LT | T | L | R |
| Maximum Queue (ft) | 120 | 73 | 31 | 163 | 169 | 123 | 54 |
| Average Queue (ft) | 35 | 12 | 4 | 68 | 18 | 62 | 27 |
| 95th Queue (ft) | 91 | 44 | 20 | 146 | 92 | 112 | 55 |
| Link Distance (ft) | 804 | 804 | | 157 | 157 | 123 | 123 |
| Upstream Blk Time (%) | | | | 1 | 0 | 1 | |
| Queuing Penalty (veh) | | | | 3 | 1 | 1 | |
| Storage Bay Dist (ft) | | | 85 | | | | |
| Storage Blk Time (%) | | 0 | | | | | |
| Queuing Penalty (veh) | | 0 | | | | | |

HCM 6th Signalized Intersection Summary

1: Birch Rd & North Druid Hills

11/29/2021



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------------|------|-------|------|------|------|-------|
| Lane Configurations | ↑↑ | ↑ | | ↑↑ | ↑ | ↑ |
| Traffic Volume (veh/h) | 898 | 74 | 90 | 993 | 57 | 54 |
| Future Volume (veh/h) | 898 | 74 | 90 | 993 | 57 | 54 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 976 | 80 | 98 | 1079 | 62 | 59 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 3135 | 1398 | 222 | 2399 | 91 | 81 |
| Arrive On Green | 0.88 | 0.88 | 1.00 | 1.00 | 0.05 | 0.05 |
| Sat Flow, veh/h | 3647 | 1585 | 219 | 2805 | 1781 | 1585 |
| Grp Volume(v), veh/h | 976 | 80 | 534 | 643 | 62 | 59 |
| Grp Sat Flow(s),veh/h/ln | 1777 | 1585 | 1322 | 1617 | 1781 | 1585 |
| Q Serve(g_s), s | 6.7 | 0.9 | 0.0 | 0.0 | 5.1 | 5.5 |
| Cycle Q Clear(g_c), s | 6.7 | 0.9 | 0.0 | 0.0 | 5.1 | 5.5 |
| Prop In Lane | | 1.00 | 0.18 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 3135 | 1398 | 1195 | 1426 | 91 | 81 |
| V/C Ratio(X) | 0.31 | 0.06 | 0.45 | 0.45 | 0.68 | 0.73 |
| Avail Cap(c_a), veh/h | 3135 | 1398 | 1195 | 1426 | 238 | 211 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 1.4 | 1.1 | 0.0 | 0.0 | 69.9 | 70.1 |
| Incr Delay (d2), s/veh | 0.3 | 0.1 | 1.2 | 1.0 | 8.5 | 11.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.2 | 0.2 | 0.4 | 0.4 | 2.6 | 2.5 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 1.7 | 1.2 | 1.2 | 1.0 | 78.5 | 81.8 |
| LnGrp LOS | A | A | A | A | E | F |
| Approach Vol, veh/h | 1056 | | | 1177 | 121 | |
| Approach Delay, s/veh | 1.7 | | | 1.1 | 80.1 | |
| Approach LOS | A | | | A | F | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 137.3 | | 12.7 | | 137.3 |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | | 5.0 |
| Max Green Setting (Gmax), s | | 120.0 | | 20.0 | | 120.0 |
| Max Q Clear Time (g_c+I1), s | | 2.0 | | 7.5 | | 8.7 |
| Green Ext Time (p_c), s | | 11.7 | | 0.2 | | 8.7 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 5.4 | | | |
| HCM 6th LOS | | | A | | | |

Intersection: 1: Birch Rd & North Druid Hills

| Movement | EB | EB | EB | WB | WB | NB | NB |
|-----------------------|------|------|-----|-----|-----|-----|-----|
| Directions Served | T | T | R | LT | T | L | R |
| Maximum Queue (ft) | 4878 | 4868 | 125 | 177 | 227 | 130 | 119 |
| Average Queue (ft) | 2659 | 2669 | 74 | 100 | 106 | 48 | 48 |
| 95th Queue (ft) | 5456 | 5446 | 170 | 207 | 246 | 100 | 96 |
| Link Distance (ft) | 4950 | 4950 | | 158 | 158 | 126 | 126 |
| Upstream Blk Time (%) | 13 | 14 | | 7 | 7 | 1 | 0 |
| Queuing Penalty (veh) | 0 | 0 | | 43 | 43 | 0 | 0 |
| Storage Bay Dist (ft) | | | 85 | | | | |
| Storage Blk Time (%) | | 44 | 0 | | | | |
| Queuing Penalty (veh) | | 56 | 0 | | | | |

Intersection: 2: DW1 & North Druid Hills

| Movement | EB | EB | WB | WB | NB |
|-----------------------|-----|-----|-----|-----|-----|
| Directions Served | T | T | T | T | R |
| Maximum Queue (ft) | 190 | 190 | 196 | 202 | 103 |
| Average Queue (ft) | 129 | 136 | 38 | 31 | 29 |
| 95th Queue (ft) | 228 | 232 | 142 | 132 | 96 |
| Link Distance (ft) | 158 | 158 | 810 | 810 | 317 |
| Upstream Blk Time (%) | 6 | 8 | | | |
| Queuing Penalty (veh) | 39 | 56 | | | |
| Storage Bay Dist (ft) | | | | | |
| Storage Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |

Intersection: 3: Birch Rd & DW2

| Movement | WB | NB | SB |
|-----------------------|-----|-----|-----|
| Directions Served | LR | T | LT |
| Maximum Queue (ft) | 57 | 6 | 44 |
| Average Queue (ft) | 30 | 0 | 5 |
| 95th Queue (ft) | 45 | 5 | 24 |
| Link Distance (ft) | 164 | 320 | 126 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

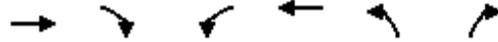
Zone Summary

Zone wide Queuing Penalty: 238

HCM 6th Signalized Intersection Summary

1: Birch Rd & North Druid Hills

11/23/2021



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------------|-------|---------|-------|-------|------|---------|
| Lane Configurations | ↑↑ | ↗ | | ↑↑ | ↖ | ↗ |
| Traffic Volume (veh/h) | 2040 | 129 | 31 | 1166 | 58 | 54 |
| Future Volume (veh/h) | 2040 | 129 | 31 | 1166 | 58 | 54 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1477 | 1477 | 1477 | 1477 | 1477 | 1477 |
| Adj Flow Rate, veh/h | 2103 | 140 | 34 | 1267 | 63 | 59 |
| Peak Hour Factor | 0.97 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 2127 | 949 | 24 | 1270 | 244 | 217 |
| Arrive On Green | 0.76 | 0.76 | 1.00 | 1.00 | 0.17 | 0.17 |
| Sat Flow, veh/h | 2879 | 1251 | 2 | 1742 | 1406 | 1251 |
| Grp Volume(v), veh/h | 2103 | 140 | 576 | 725 | 63 | 59 |
| Grp Sat Flow(s),veh/h/ln | 1403 | 1251 | 400 | 1277 | 1406 | 1251 |
| Q Serve(g_s), s | 123.0 | 5.2 | 5.9 | 0.0 | 6.6 | 7.0 |
| Cycle Q Clear(g_c), s | 123.0 | 5.2 | 128.9 | 0.0 | 6.6 | 7.0 |
| Prop In Lane | | 1.00 | 0.06 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 2127 | 949 | 326 | 968 | 244 | 217 |
| V/C Ratio(X) | 0.99 | 0.15 | 1.77 | 0.75 | 0.26 | 0.27 |
| Avail Cap(c_a), veh/h | 2127 | 949 | 326 | 968 | 244 | 217 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 19.8 | 5.6 | 68.5 | 0.0 | 60.8 | 60.9 |
| Incr Delay (d2), s/veh | 17.0 | 0.3 | 357.7 | 5.3 | 2.5 | 3.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 39.1 | 1.4 | 43.2 | 1.4 | 2.6 | 2.4 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 36.8 | 5.9 | 426.2 | 5.3 | 63.3 | 64.0 |
| LnGrp LOS | D | A | F | A | E | E |
| Approach Vol, veh/h | 2243 | | | 1301 | 122 | |
| Approach Delay, s/veh | 34.9 | | | 191.7 | 63.7 | |
| Approach LOS | C | | | F | E | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 135.0 | | 35.0 | | 135.0 |
| Change Period (Y+Rc), s | | * 6.1 | | 5.5 | | * 6.1 |
| Max Green Setting (Gmax), s | | * 1.3E2 | | 29.5 | | * 1.3E2 |
| Max Q Clear Time (g_c+I1), s | | 130.9 | | 9.0 | | 125.0 |
| Green Ext Time (p_c), s | | 0.0 | | 0.3 | | 3.6 |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 91.5 |
| HCM 6th LOS | F |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.1 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑↑ | ↑ | | ↑↑ | | ↑ |
| Traffic Vol, veh/h | 2073 | 1 | 0 | 1197 | 0 | 8 |
| Future Vol, veh/h | 2073 | 1 | 0 | 1197 | 0 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 2253 | 1 | 0 | 1301 | 0 | 9 |

| Major/Minor | Major1 | Major2 | Minor1 | | |
|----------------------|--------|--------|--------|---|--------|
| Conflicting Flow All | 0 | 0 | - | - | - 1127 |
| Stage 1 | - | - | - | - | - |
| Stage 2 | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - 3.32 |
| Pot Cap-1 Maneuver | - | - | 0 | - | 0 199 |
| Stage 1 | - | - | 0 | - | 0 |
| Stage 2 | - | - | 0 | - | 0 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | - | - | - 199 |
| Mov Cap-2 Maneuver | - | - | - | - | - |
| Stage 1 | - | - | - | - | - |
| Stage 2 | - | - | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 23.9 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|-----------------------|-------|-----|-----|-----|
| Capacity (veh/h) | 199 | - | - | - |
| HCM Lane V/C Ratio | 0.044 | - | - | - |
| HCM Control Delay (s) | 23.9 | - | - | - |
| HCM Lane LOS | C | - | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 3.9 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ↔ | | ↕ | | | ↕ |
| Traffic Vol, veh/h | 0 | 69 | 53 | 8 | 69 | 91 |
| Future Vol, veh/h | 0 | 69 | 53 | 8 | 69 | 91 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 75 | 58 | 9 | 75 | 99 |

| Major/Minor | Minor1 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|-------|---|
| Conflicting Flow All | 312 | 34 | 0 | 0 | 67 | 0 |
| Stage 1 | 63 | - | - | - | - | - |
| Stage 2 | 249 | - | - | - | - | - |
| Critical Hdwy | 6.63 | 6.93 | - | - | 4.13 | - |
| Critical Hdwy Stg 1 | 5.83 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.43 | - | - | - | - | - |
| Follow-up Hdwy | 3.519 | 3.319 | - | - | 2.219 | - |
| Pot Cap-1 Maneuver | 668 | 1032 | - | - | 1534 | - |
| Stage 1 | 953 | - | - | - | - | - |
| Stage 2 | 792 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 633 | 1032 | - | - | 1534 | - |
| Mov Cap-2 Maneuver | 633 | - | - | - | - | - |
| Stage 1 | 953 | - | - | - | - | - |
| Stage 2 | 751 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 8.8 | 0 | 3.2 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 1032 | 1534 |
| HCM Lane V/C Ratio | - | - | 0.073 | 0.049 |
| HCM Control Delay (s) | - | - | 8.8 | 7.5 |
| HCM Lane LOS | - | - | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 0.2 |

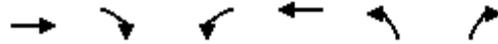
Intersection: 1: Birch Rd & North Druid Hills

| Movement | EB | EB | EB | WB | WB | WB | NB | NB |
|-----------------------|------|------|-----|-----|-----|-----|-----|-----|
| Directions Served | T | T | R | L | T | T | L | R |
| Maximum Queue (ft) | 4887 | 4895 | 125 | 80 | 100 | 94 | 114 | 114 |
| Average Queue (ft) | 2591 | 2605 | 73 | 31 | 18 | 27 | 54 | 48 |
| 95th Queue (ft) | 5482 | 5483 | 168 | 73 | 61 | 74 | 104 | 101 |
| Link Distance (ft) | 4951 | 4951 | | | 158 | 158 | 120 | 120 |
| Upstream Blk Time (%) | 18 | 19 | | | 0 | | 2 | 1 |
| Queuing Penalty (veh) | 0 | 0 | | | 0 | | 1 | 1 |
| Storage Bay Dist (ft) | | | 85 | 250 | | | | |
| Storage Blk Time (%) | | 42 | 0 | | 0 | | | |
| Queuing Penalty (veh) | | 54 | 0 | | 0 | | | |

HCM 6th Signalized Intersection Summary

1: Birch Rd & North Druid Hills

11/24/2021



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--|-------|---------|------|------|------|---------|
| Lane Configurations | ↑↑ | ↑ | ↵ | ↑↑ | ↵ | ↵ |
| Traffic Volume (veh/h) | 2040 | 129 | 31 | 1166 | 58 | 54 |
| Future Volume (veh/h) | 2040 | 129 | 31 | 1166 | 58 | 54 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1477 | 1477 | 1477 | 1477 | 1477 | 1477 |
| Adj Flow Rate, veh/h | 2103 | 140 | 34 | 1267 | 63 | 59 |
| Peak Hour Factor | 0.97 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 2144 | 956 | 83 | 2292 | 161 | 144 |
| Arrive On Green | 0.76 | 0.76 | 0.05 | 1.00 | 0.11 | 0.11 |
| Sat Flow, veh/h | 2879 | 1251 | 1406 | 2879 | 1406 | 1251 |
| Grp Volume(v), veh/h | 2103 | 140 | 34 | 1267 | 63 | 59 |
| Grp Sat Flow(s),veh/h/ln | 1403 | 1251 | 1406 | 1403 | 1406 | 1251 |
| Q Serve(g_s), s | 120.0 | 5.1 | 0.8 | 0.0 | 7.1 | 7.4 |
| Cycle Q Clear(g_c), s | 120.0 | 5.1 | 0.8 | 0.0 | 7.1 | 7.4 |
| Prop In Lane | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 2144 | 956 | 83 | 2292 | 161 | 144 |
| V/C Ratio(X) | 0.98 | 0.15 | 0.41 | 0.55 | 0.39 | 0.41 |
| Avail Cap(c_a), veh/h | 2144 | 956 | 216 | 2292 | 161 | 144 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 18.9 | 5.3 | 52.2 | 0.0 | 69.7 | 69.9 |
| Incr Delay (d2), s/veh | 15.4 | 0.3 | 3.2 | 1.0 | 7.0 | 8.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 37.4 | 1.3 | 1.2 | 0.3 | 2.9 | 5.6 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 34.3 | 5.6 | 55.4 | 1.0 | 76.7 | 78.4 |
| LnGrp LOS | C | A | E | A | E | E |
| Approach Vol, veh/h | 2243 | | | 1301 | 122 | |
| Approach Delay, s/veh | 32.5 | | | 2.4 | 77.5 | |
| Approach LOS | C | | | A | E | |
| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
| Phs Duration (G+Y+Rc), s | | 145.0 | | 25.0 | 9.0 | 136.0 |
| Change Period (Y+Rc), s | | * 6.1 | | 5.5 | 5.0 | * 6.1 |
| Max Green Setting (Gmax), s | | * 1.4E2 | | 19.5 | 20.0 | * 1.1E2 |
| Max Q Clear Time (g_c+I1), s | | 2.0 | | 9.4 | 2.8 | 122.0 |
| Green Ext Time (p_c), s | | 12.8 | | 0.2 | 0.0 | 0.0 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 23.3 | | | |
| HCM 6th LOS | | | C | | | |
| Notes | | | | | | |
| * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier. | | | | | | |

Intersection: 1: Birch Rd & North Druid Hills

| Movement | EB | EB | EB | WB | WB | NB | NB |
|-----------------------|------|------|-----|-----|-----|-----|-----|
| Directions Served | T | T | R | LT | T | L | R |
| Maximum Queue (ft) | 4994 | 4995 | 125 | 182 | 234 | 127 | 135 |
| Average Queue (ft) | 2594 | 2606 | 69 | 101 | 108 | 55 | 56 |
| 95th Queue (ft) | 5601 | 5596 | 164 | 212 | 248 | 114 | 121 |
| Link Distance (ft) | 4950 | 4950 | | 158 | 158 | 126 | 126 |
| Upstream Blk Time (%) | 16 | 15 | | 6 | 6 | 1 | 2 |
| Queuing Penalty (veh) | 0 | 0 | | 35 | 33 | 1 | 1 |
| Storage Bay Dist (ft) | | | 85 | | | | |
| Storage Blk Time (%) | | 42 | 0 | | | | |
| Queuing Penalty (veh) | | 54 | 0 | | | | |

Intersection: 2: DW1 & North Druid Hills

| Movement | EB | EB | EB | WB | WB | NB |
|-----------------------|-----|-----|-----|-----|-----|-----|
| Directions Served | T | T | R | T | T | R |
| Maximum Queue (ft) | 196 | 189 | 101 | 163 | 152 | 81 |
| Average Queue (ft) | 141 | 143 | 4 | 33 | 28 | 22 |
| 95th Queue (ft) | 233 | 229 | 43 | 118 | 107 | 67 |
| Link Distance (ft) | 158 | 158 | 158 | 810 | 810 | 317 |
| Upstream Blk Time (%) | 14 | 16 | 0 | | | |
| Queuing Penalty (veh) | 99 | 113 | 2 | | | |
| Storage Bay Dist (ft) | | | | | | |
| Storage Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |

Intersection: 3: Birch Rd & DW2

| Movement | WB | NB | SB |
|-----------------------|-----|-----|-----|
| Directions Served | LR | TR | LT |
| Maximum Queue (ft) | 77 | 12 | 36 |
| Average Queue (ft) | 30 | 0 | 5 |
| 95th Queue (ft) | 56 | 6 | 25 |
| Link Distance (ft) | 164 | 320 | 126 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

Zone Summary

Zone wide Queuing Penalty: 337

HCM 6th Signalized Intersection Summary

1: Birch Rd & North Druid Hills

11/23/2021



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--|------|---------|-------|------|------|---------|
| Lane Configurations | ↑↑ | ↗ | | ↑↑ | ↖ | ↗ |
| Traffic Volume (veh/h) | 2040 | 129 | 31 | 1166 | 58 | 54 |
| Future Volume (veh/h) | 2040 | 129 | 31 | 1166 | 58 | 54 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1477 | 1477 | 1477 | 1477 | 1477 | 1477 |
| Adj Flow Rate, veh/h | 2103 | 140 | 34 | 1267 | 63 | 59 |
| Peak Hour Factor | 0.97 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 2446 | 1091 | 49 | 1825 | 84 | 75 |
| Arrive On Green | 0.87 | 0.87 | 1.00 | 1.00 | 0.06 | 0.06 |
| Sat Flow, veh/h | 2879 | 1251 | 30 | 2160 | 1406 | 1251 |
| Grp Volume(v), veh/h | 2103 | 140 | 591 | 710 | 63 | 59 |
| Grp Sat Flow(s),veh/h/ln | 1403 | 1251 | 847 | 1277 | 1406 | 1251 |
| Q Serve(g_s), s | 65.2 | 2.7 | 83.1 | 0.0 | 7.5 | 7.9 |
| Cycle Q Clear(g_c), s | 65.2 | 2.7 | 148.2 | 0.0 | 7.5 | 7.9 |
| Prop In Lane | | 1.00 | 0.06 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 2446 | 1091 | 761 | 1113 | 84 | 75 |
| V/C Ratio(X) | 0.86 | 0.13 | 0.78 | 0.64 | 0.75 | 0.79 |
| Avail Cap(c_a), veh/h | 2446 | 1091 | 761 | 1113 | 244 | 217 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 5.6 | 1.6 | 13.1 | 0.0 | 78.7 | 78.9 |
| Incr Delay (d2), s/veh | 4.2 | 0.2 | 7.7 | 2.8 | 12.4 | 16.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 12.9 | 0.5 | 15.8 | 0.9 | 3.0 | 2.9 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 9.8 | 1.8 | 20.8 | 2.8 | 91.1 | 95.3 |
| LnGrp LOS | A | A | C | A | F | F |
| Approach Vol, veh/h | 2243 | | | 1301 | 122 | |
| Approach Delay, s/veh | 9.3 | | | 11.0 | 93.1 | |
| Approach LOS | A | | | B | F | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 154.3 | | 15.7 | | 154.3 |
| Change Period (Y+Rc), s | | * 6.1 | | 5.5 | | * 6.1 |
| Max Green Setting (Gmax), s | | * 1.3E2 | | 29.5 | | * 1.3E2 |
| Max Q Clear Time (g_c+I1), s | | 150.2 | | 9.9 | | 67.2 |
| Green Ext Time (p_c), s | | 0.0 | | 0.3 | | 34.5 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 12.7 | | | |
| HCM 6th LOS | | | B | | | |
| Notes | | | | | | |
| * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier. | | | | | | |

HCM 6th TWSC
2: DW1 & North Druid Hills

11/23/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.1 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑↑ | ↑ | | ↑↑ | | ↑ |
| Traffic Vol, veh/h | 2073 | 1 | 0 | 1197 | 0 | 8 |
| Future Vol, veh/h | 2073 | 1 | 0 | 1197 | 0 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 2253 | 1 | 0 | 1301 | 0 | 9 |

| Major/Minor | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|------------|
| Conflicting Flow All | 0 | 0 | - - - 1127 |
| Stage 1 | - | - | - - - |
| Stage 2 | - | - | - - - |
| Critical Hdwy | - | - | - - - 6.94 |
| Critical Hdwy Stg 1 | - | - | - - - |
| Critical Hdwy Stg 2 | - | - | - - - |
| Follow-up Hdwy | - | - | - - - 3.32 |
| Pot Cap-1 Maneuver | - | - 0 | - 0 199 |
| Stage 1 | - | - 0 | - 0 - |
| Stage 2 | - | - 0 | - 0 - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | - | - | - - - 199 |
| Mov Cap-2 Maneuver | - | - | - - - |
| Stage 1 | - | - | - - - |
| Stage 2 | - | - | - - - |

| Approach | EB | WB | NB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 23.9 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|-----------------------|-------|-----|-----|-----|
| Capacity (veh/h) | 199 | - | - | - |
| HCM Lane V/C Ratio | 0.044 | - | - | - |
| HCM Control Delay (s) | 23.9 | - | - | - |
| HCM Lane LOS | C | - | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 3.9 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ↔ | | ↕ | | | ↕ |
| Traffic Vol, veh/h | 0 | 69 | 53 | 8 | 69 | 91 |
| Future Vol, veh/h | 0 | 69 | 53 | 8 | 69 | 91 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 75 | 58 | 9 | 75 | 99 |

| Major/Minor | Minor1 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|-------|---|
| Conflicting Flow All | 312 | 34 | 0 | 0 | 67 | 0 |
| Stage 1 | 63 | - | - | - | - | - |
| Stage 2 | 249 | - | - | - | - | - |
| Critical Hdwy | 6.63 | 6.93 | - | - | 4.13 | - |
| Critical Hdwy Stg 1 | 5.83 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.43 | - | - | - | - | - |
| Follow-up Hdwy | 3.519 | 3.319 | - | - | 2.219 | - |
| Pot Cap-1 Maneuver | 668 | 1032 | - | - | 1534 | - |
| Stage 1 | 953 | - | - | - | - | - |
| Stage 2 | 792 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 633 | 1032 | - | - | 1534 | - |
| Mov Cap-2 Maneuver | 633 | - | - | - | - | - |
| Stage 1 | 953 | - | - | - | - | - |
| Stage 2 | 751 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 8.8 | 0 | 3.2 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 1032 | 1534 |
| HCM Lane V/C Ratio | - | - | 0.073 | 0.049 |
| HCM Control Delay (s) | - | - | 8.8 | 7.5 |
| HCM Lane LOS | - | - | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 0.2 |

Intersection: 1: Birch Rd & North Druid Hills

| Movement | EB | EB | EB | WB | WB | NB | NB |
|-----------------------|------|------|-----|-----|-----|-----|-----|
| Directions Served | T | T | R | LT | T | L | R |
| Maximum Queue (ft) | 4986 | 4998 | 125 | 188 | 233 | 69 | 79 |
| Average Queue (ft) | 2741 | 2755 | 73 | 154 | 170 | 32 | 30 |
| 95th Queue (ft) | 5527 | 5527 | 165 | 203 | 238 | 64 | 65 |
| Link Distance (ft) | 4950 | 4950 | | 158 | 158 | 126 | 126 |
| Upstream Blk Time (%) | 19 | 19 | | 13 | 15 | | 0 |
| Queuing Penalty (veh) | 0 | 0 | | 76 | 91 | | 0 |
| Storage Bay Dist (ft) | | | 85 | | | | |
| Storage Blk Time (%) | | 44 | 0 | | | | |
| Queuing Penalty (veh) | | 57 | 0 | | | | |

HCM 6th Signalized Intersection Summary

1: Birch Rd & North Druid Hills

11/24/2021



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--|------|-------|------|------|------|-------|
| Lane Configurations | ↑↑ | ↑ | | ↑↑ | ↑ | ↑ |
| Traffic Volume (veh/h) | 2040 | 129 | 31 | 1166 | 58 | 54 |
| Future Volume (veh/h) | 2040 | 129 | 31 | 1166 | 58 | 54 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1477 | 1477 | 1477 | 1477 | 1477 | 1477 |
| Adj Flow Rate, veh/h | 2103 | 140 | 34 | 1267 | 63 | 59 |
| Peak Hour Factor | 0.97 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 2220 | 990 | 53 | 1670 | 102 | 90 |
| Arrive On Green | 0.79 | 0.79 | 1.00 | 1.00 | 0.07 | 0.07 |
| Sat Flow, veh/h | 2879 | 1251 | 11 | 2177 | 1406 | 1251 |
| Grp Volume(v), veh/h | 2103 | 140 | 621 | 680 | 63 | 59 |
| Grp Sat Flow(s),veh/h/ln | 1403 | 1251 | 845 | 1277 | 1406 | 1251 |
| Q Serve(g_s), s | 53.1 | 2.2 | 14.1 | 0.0 | 3.7 | 3.9 |
| Cycle Q Clear(g_c), s | 53.1 | 2.2 | 67.3 | 0.0 | 3.7 | 3.9 |
| Prop In Lane | | 1.00 | 0.05 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 2220 | 990 | 713 | 1010 | 102 | 90 |
| V/C Ratio(X) | 0.95 | 0.14 | 0.87 | 0.67 | 0.62 | 0.65 |
| Avail Cap(c_a), veh/h | 2220 | 990 | 713 | 1010 | 323 | 287 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 7.4 | 2.1 | 13.6 | 0.0 | 38.3 | 38.4 |
| Incr Delay (d2), s/veh | 10.2 | 0.3 | 13.8 | 3.6 | 6.0 | 7.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 9.9 | 0.3 | 6.2 | 1.0 | 1.4 | 1.4 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 17.6 | 2.4 | 27.4 | 3.6 | 44.3 | 46.1 |
| LnGrp LOS | B | A | C | A | D | D |
| Approach Vol, veh/h | 2243 | | | 1301 | 122 | |
| Approach Delay, s/veh | 16.7 | | | 15.0 | 45.2 | |
| Approach LOS | B | | | B | D | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 73.4 | | 11.6 | | 73.4 |
| Change Period (Y+Rc), s | | * 6.1 | | 5.5 | | * 6.1 |
| Max Green Setting (Gmax), s | | * 54 | | 19.5 | | * 54 |
| Max Q Clear Time (g_c+I1), s | | 69.3 | | 5.9 | | 55.1 |
| Green Ext Time (p_c), s | | 0.0 | | 0.2 | | 0.0 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 17.0 | | | |
| HCM 6th LOS | | | B | | | |
| Notes | | | | | | |
| * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier. | | | | | | |

Intersection: 1: Birch Rd & North Druid Hills

| Movement | EB | EB | EB | WB | WB | NB | NB |
|-----------------------|------|------|-----|-----|-----|-----|-----|
| Directions Served | T | T | R | LT | T | L | R |
| Maximum Queue (ft) | 4985 | 5002 | 125 | 164 | 223 | 95 | 147 |
| Average Queue (ft) | 2916 | 2927 | 61 | 95 | 99 | 46 | 81 |
| 95th Queue (ft) | 5718 | 5721 | 160 | 210 | 238 | 92 | 155 |
| Link Distance (ft) | 4950 | 4950 | | 158 | 158 | 126 | 126 |
| Upstream Blk Time (%) | 24 | 25 | | 5 | 4 | | 23 |
| Queuing Penalty (veh) | 0 | 0 | | 28 | 23 | | 14 |
| Storage Bay Dist (ft) | | | 85 | | | | |
| Storage Blk Time (%) | | 45 | 0 | | | | |
| Queuing Penalty (veh) | | 58 | 0 | | | | |

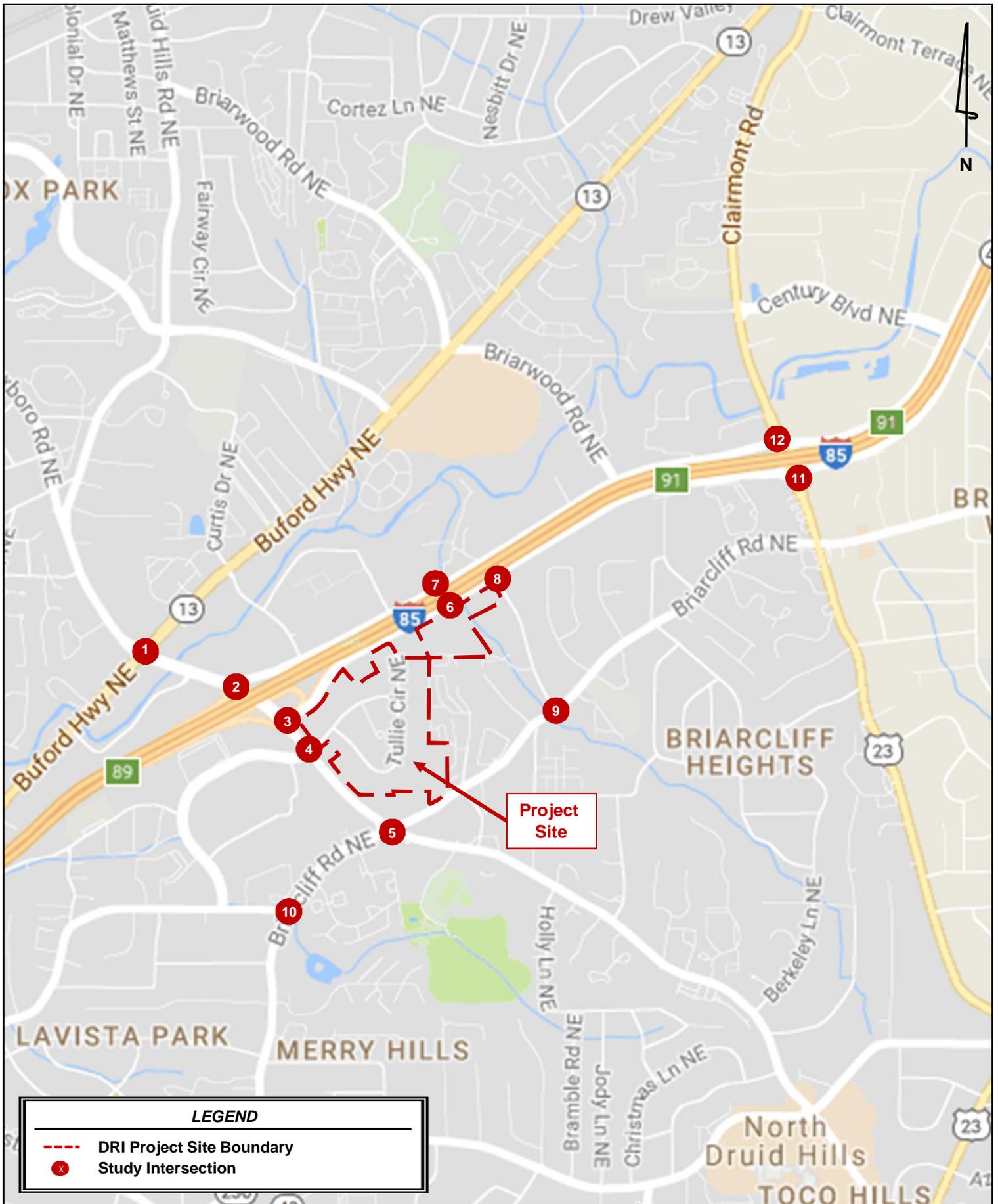
HCM 6th Signalized Intersection Summary

1: Birch Rd & North Druid Hills

11/29/2021



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--|------|---------|-------|------|------|---------|
| Lane Configurations | ↑↑ | ↗ | | ↑↑ | ↖ | ↗ |
| Traffic Volume (veh/h) | 2040 | 129 | 31 | 1166 | 58 | 54 |
| Future Volume (veh/h) | 2040 | 129 | 31 | 1166 | 58 | 54 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1477 | 1477 | 1477 | 1477 | 1477 | 1477 |
| Adj Flow Rate, veh/h | 2103 | 140 | 34 | 1267 | 63 | 59 |
| Peak Hour Factor | 0.97 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 2448 | 1092 | 49 | 1828 | 83 | 74 |
| Arrive On Green | 0.87 | 0.87 | 1.00 | 1.00 | 0.06 | 0.06 |
| Sat Flow, veh/h | 2879 | 1251 | 30 | 2162 | 1406 | 1251 |
| Grp Volume(v), veh/h | 2103 | 140 | 591 | 710 | 63 | 59 |
| Grp Sat Flow(s),veh/h/ln | 1403 | 1251 | 849 | 1277 | 1406 | 1251 |
| Q Serve(g_s), s | 64.9 | 2.7 | 83.4 | 0.0 | 7.5 | 7.9 |
| Cycle Q Clear(g_c), s | 64.9 | 2.7 | 148.3 | 0.0 | 7.5 | 7.9 |
| Prop In Lane | | 1.00 | 0.06 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 2448 | 1092 | 763 | 1114 | 83 | 74 |
| V/C Ratio(X) | 0.86 | 0.13 | 0.77 | 0.64 | 0.76 | 0.80 |
| Avail Cap(c_a), veh/h | 2448 | 1092 | 763 | 1114 | 161 | 144 |
| HCM Platoon Ratio | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 5.5 | 1.6 | 12.9 | 0.0 | 78.7 | 78.9 |
| Incr Delay (d2), s/veh | 4.2 | 0.2 | 7.6 | 2.8 | 12.9 | 17.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 12.7 | 0.5 | 15.6 | 0.9 | 3.0 | 2.9 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 9.7 | 1.8 | 20.5 | 2.8 | 91.7 | 96.1 |
| LnGrp LOS | A | A | C | A | F | F |
| Approach Vol, veh/h | 2243 | | | 1301 | 122 | |
| Approach Delay, s/veh | 9.2 | | | 10.8 | 93.8 | |
| Approach LOS | A | | | B | F | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 154.4 | | 15.6 | | 154.4 |
| Change Period (Y+Rc), s | | * 6.1 | | 5.5 | | * 6.1 |
| Max Green Setting (Gmax), s | | * 1.4E2 | | 19.5 | | * 1.4E2 |
| Max Q Clear Time (g_c+I1), s | | 150.3 | | 9.9 | | 66.9 |
| Green Ext Time (p_c), s | | 0.0 | | 0.2 | | 37.2 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 12.6 | | | |
| HCM 6th LOS | | | B | | | |
| Notes | | | | | | |
| * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier. | | | | | | |



NEXT STEPS

Following an approval of this zoning action, one or several of the following may be required:

Land Disturbance Permit *(Required for of new building construction on non-residential properties, or land disturbance/improvement such as storm water detention, paving, digging, or landscaping.)*

Building Permit *(New construction or renovation of a building (interior or exterior) may require full plan submittal or other documentation. zoning, site development, watershed and health department standards will be checked for compliance.)*

Certificate of Occupancy *(Required prior to occupation of a commercial space and for use of property for any business type. The issuance follows the review of submitted plans if required based on the type occupancy.)*

Plat Approval *(Required if any parcel is being subdivided, re-parceled, or combined. Issued “administratively”; no public hearing required.)*

Sketch Plat Approval *(Required for the subdivision of property into three lots or more. Requires a public hearing by the Planning Commission.)*

Overlay Review *(Required review of development and building plans for all new construction or exterior modification of building(s) located within a designated overlay district.)*

Historic Preservation *(Certificate of Appropriateness required for any proposed changes to building exteriors or improvements to land when located within the Druid Hills or the Soapstone Geological Historic Districts. Historic Preservation Committee public hearing may be required.)*

Variance or Special Exception *(Required seeking relief from any development standards of the Zoning Ordinance. A public hearing and action by the Board of Appeals are required for most variances.)*

Minor Modification *(Required if there are any proposed minor changes to zoning conditions that were approved by the Board of Commissioners. The review is administrative if the changes are determined to be minor as described by Zoning Code.)*

Major Modification *(Required submittal of a complete zoning application for a public hearing if there are any proposed changes to zoning conditions approved by the Board of Commissioner on a prior rezoning.)*

Business License *(Required for any business or non-residential enterprise operating in Unincorporated DeKalb County, including in-home occupations).*

Alcohol License *(Required permit to sell alcohol for consumption on-site or packaged for off-site consumption. Signed and sealed distance survey is required. Background checks will be performed.)*

Each of the approvals and permits listed above require submittal of application, fees and supporting documents. Please consult with the appropriate department/division.